# arCELF5 METALINGUISTICS 

## Examiner's Manual



## (\#) PsychCorp

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Overview of the CELF-5 Metalinguistics Assessment Process
he Clinical Evaluation of Language Fundamentals-Fifth Edition Metalinguistics (CELF-5 Metalinguistics) is a revision of the Test of Language Competence-Expanded (TLC-E; Wiig \& Secord, 1989). CELF-5 Metalinguistics is an individually administered clinical tool designed to identify students 9-21 years old who have not acquired the expected levels of communicative competence and metalinguistic ability for their age. The assessment measures a student's ability to make inferences, construct conversationally appropriate sentences, understand lexical (word-level) and structural (sentence-level) ambiguity, and understand figurative language. The test may be used for initial diagnosis of a language disorder, especially as it relates to meta-pragmatic and meta-semantic skills; it may also be used to evaluate metalinguistic aspects of a social (pragmatic) communication disorder, or to complement or extend the assessment of the social-pragmatic communication skills assessed by Clinical Evaluation of Language Fundamentals-Fifth Edition (CELF-5). CELF-5 Metalinguistics may be administered by speech-language pathologists, school psychologists, special educators, and diagnosticians who have been trained and are experienced in administration and interpretation of individually-administered standardized language tests.

CELF-5 Metalinguistics has been updated to enable clinicians to:

- Evaluate a student's metalinguistic strengths and weaknesses, address parent and teacher concerns, and develop an Individualized Education Program (IEP; IDEA, 1997, 2004) as needed.
- Link the skills assessed to the student's curriculum goals, classroom activities, and interventions.
- Use the Metalinguistics Profile as a checklist for evaluating how deficits in metalinguistic development manifest in real-life educational and social contexts.
- Be sensitive to cultural and linguistic diversity and address components within the World Health Organization's International Classification of Functioning, Disability, and Health (2001).
- Use visual stimuli that appeals to older students.

CELF-5 Metalinguistics presents an assessment process that takes into account the initial steps of the clinical decision-making process, including:

- Recommending classroom language adaptations and accommodations.
- Determining eligibility for in-classroom interventions or direct services.
- Providing norm-referenced information that aids in the diagnosis of a language disorder and in the determination of eligibility for services.
- Identifying communication strengths and weaknesses.
- Planning curriculum-relevant intervention.
- Measuring treatment efficacy.

Using CELF-5 Metalinguistics, clinicians can evaluate a student's language competence and metalinguistic ability and obtain information that assists in determining if the student has a language disorder. Once it is determined that a student has a language disorder, the assessment process can extend to determining if the student has metalinguistic weaknesses in the areas of semantics or pragmatics.

## CELF-5 Metalinguistics Diagnostic Battery Features

As a diagnostic battery, CELF-5 Metalinguistics is an important part of the total assessment process in which a clinician collects evidence about a student's communication abilities in multiple contexts. In the previous edition (TLC-E), each group of test items assessing a specific language skill was called a subtest. CELF-5 Metalinguistics has been developed and researched to enable clinicians to use each group of items independently of the others. Consequently, each group of items that makes up CELF-5 Metalinguistics, (e.g., Making Inferences, Conversation Skills) is referred to as a test.

The CELF-5 Metalinguistics battery includes four tests that have been substantially revised from the previous edition and one new test (i.e., Metalinguistics Profile) designed to measure the student's performance in academic and social situations. The Making Inferences test (previously named Listening Comprehension: Making Inferences) is used to evaluate the ability to make logical inferences when given the beginning and end of a familiar scenario. The Conversation Skills test (previously named Oral Expression: Recreating Speech Acts/Recreating Sentences) is used to evaluate the student's ability to produce a conversationally appropriate utterance given the context (situation) and two or three stimulus words. The Multiple Meanings test (previously named Ambiguous Sentences) is used to evaluate the student's ability to detect lexical (word-level) and structural (sentence-level) ambiguities. The Figurative Language test is used to evaluate the student's ability to interpret figurative expressions within a given situational context.

Scaled scores, composite standard scores (Index scores), and percentile ranks enhance clinical decision making. Growth Scale Values have been added to help measure student progress over time.

Table 1.1 Descriptions of the Tests in the CELF-5 Metalinguistics Assessment Battery

| Metalinguistics Profile | After observing the student, the clinician (as needed) obtains information from one or <br> more informants (e.g., teachers and/or parents/caregivers) who are familiar with the <br> student and completes the rating scale. |
| :--- | :--- |
| The clinician shows the student a page in the Stimulus Book that contains two statements <br> followed by four response options. The first statement is a lead-in sentence that <br> describes a context or initiates a chain of events. The second statement is a concluding <br> sentence. The four response options that follow describe potential inferences that could <br> be made given the lead-in and concluding statements. The clinician reads the lead-in and <br> concluding sentences and the response options aloud and asks the student to identify <br> the two response options that best explain the concluding sentence. Then the clinician <br> asks the student to provide an additional reason (i.e., an additional inference) that could <br> be made to explain the concluding statement. |  |
| Making Inferences | The clinician shows the student a page in the Stimulus Book that has a picture with two <br> or three target words above it. The clinician reads the words aloud and asks the student <br> to use all of the target words to make a sentence that one of the characters in the picture <br> could say. |
| Conversation Skills | The clinician shows the student a sentence in the Stimulus Book that contains ambiguity <br> at either the word or sentence level. The clinician reads the sentence aloud and asks the <br> student to describe two meanings for each sentence. |
| Multiple Meanings | The clinician shows the student a page in the Stimulus Book that contains a description <br> of a situation (i.e., the context) and a figurative expression that was used within that <br> context. The clinician reads the situation and expression aloud and asks the student to <br> describe what the expression means. Then the clinician presents four other figurative <br> expressions in the Stimulus Book and asks the student to select the one that has a <br> meaning closest to the first expression. |

[^0]All tests in the CELF-5 Metalinguistics battery are appropriate for administration to students ages 9 through 21 years. Table 1.2 lists the tests used for each step of the assessment process and the tests that contribute to each Index.

Table 1.2 CELF-5 Metalinguistics Tests Involved in Each Step of the Assessment Process

## Ages 9-21

Evaluating metalinguistic skills in context Metalinguistics Profile

Identifying the problem, determining eligibility, and describing the nature of the disorder
Total Metalinguistics Index (TMI)
Making Inferences
Conversation Skills
Multiple Meanings
Figurative Language
Meta-Pragmatics Index (MPI)
Making Inferences
Conversation Skills
Meta-Semantics Index (MSI)
Multiple Meanings
Figurative Language
It is important to remember that best practice for an overall evaluation of a student's language ability includes interpreting the results of any norm-referenced assessment such as CELF-5 Metalinguistics with other information, including but not limited to results of other formal and informal measures of linguistic and metalinguistic abilities, an analysis of a spontaneous language sample, classroom observations, and evaluations of pragmatic and interpersonal communication abilities.

## Administration Time

Administration time is 30 to 45 minutes, depending on the age and ability level of the student being tested.

## Test Components

## Examiner's Manual

Chapter 1 of this Examiner's Manual presents an introduction to the CELF-5 Metalinguistics tests and contains testing time information. Chapter 2 contains the administration directions for all the CELF-5 Metalinguistics tests, additional test prompts, guidelines for recording student responses, and directions for scoring. Detailed descriptions of the test objectives and their relationships to curriculum and classroom activities are also provided. Information about determining a student's error patterns using the item and error analysis tables in the Record Form is included, along with ideas for extension testing. Complete information about interpreting the CELF-5 Metalinguistics norm-referenced scaled and standard scores, percentile ranks, age equivalents, and Growth Scale Values are provided in Chapter 3, along with sample test administrations and interpretations.

## Technical Manual

The Technical Manual contains detailed information about the purpose, design, and development of CELF-5 Metalinguistics. It also presents the technical characteristics and evidence of reliability and validity.

## Stimulus Book

The Stimulus Book contains any visual stimuli you need to present demonstration, trial, and test items. It is spiral bound with an easel and includes tabbed divider pages for easy identification of the tests. The tabbed divider pages are color-coded to match the tests in the Record Form. As you flip the stimulus pages from front to back, the visual stimulus faces the student. Test names and items are abbreviated at the bottom right corner of each stimulus page.

## Record Form

The Record Form contains the Metalinguistics Profile and the verbal stimuli for each demonstration, trial, and test item in the other tests. Space is provided for recording responses and test results. An item and/or error analysis table is presented following each test to aid in determining a student's error patterns, areas for extension testing, and potential targets for intervention and follow-up. The first and last page of the Record Form are designed for recording scoring summary information.

## CELF-5 Metalinguistics Digital Kit

The digital kit presents the CELF-5 Metalinguistics Stimulus Book, Examiner's Manual, and Technical Manual on a flash drive. Insert the flash drive into your computer, print the Administration Directions from Chapter 2, and using a paper Record Form, present the test stimuli from your computer monitor. The digital kit is purchased separately.

## CELF-5 Metalinguistics Scoring on Q-global ${ }^{T M}$

CELF-5 Metalinguistics scoring is available on Q-global, a web-based digital platform that calculates all scores and presents test results in an easy to understand narrative report that can be downloaded to a word processing program and incorporated into clinical reports. CELF-5 Metalinguistics Q-global Score Reports are purchased individually or as a part of the CELF-5 Metalinguistics test kit.

## CELF-5 Metalinguistics on Q-interactive ${ }^{\text {TM }}$

CELF-5 Metalinguistics is available on Q-interactive (in development), a digital platform that allows the administration and scoring of a test using two digital tablets that work together through a Bluetooth ${ }^{\oplus}$ connection. The clinician uses one tablet to give instructions to the student, record and score responses, take notes, and control visual stimuli. The student uses the other tablet to view and respond to stimuli. CELF-5 Metalinguistics Q-interactive is purchased separately.

Because digital products are updated frequently, refer to CELF5Family.PearsonClinical.com and helloQ.com for the most current information.

## CELF-5 Metalinguistics User's Responsibilities

In accordance with the User Acceptance Form you sign when qualifying to purchase a test, it is your responsibility (the test user) to ensure that test materials, including Record Forms, remain secure and are released only to professionals who will safeguard their proper use. Although review of test results with students and/or their parents/caregivers is appropriate, this review should not include disclosure or copying of test items, Record Forms, perforated response pages, or other test materials that would compromise the security, validity, or value of the CELF-5 Metalinguistics as a measurement tool. Under no circumstance should test materials be resold or displayed in locations where unqualified individuals can purchase or view partial or complete portions of the CELF-5 Metalinguistics. This restriction includes personal Internet websites and Internet auction sites. Because all test items, norms, and other testing materials are copyrighted, the Legal Affairs Department of Pearson must approve, in writing, the copying or reproduction of any test materials. The only exception to this requirement is the copying of a completed Record Form for the purpose of conveying a student's records to another qualified professional. These user responsibilities, copyright restrictions, and test security issues are consistent with the guidelines set forth in the Standards for Educational and Psychological Testing (AERA, APA, \& NCME, 1999; in press).

[^1]Current educational practices often require that a student's performance be evaluated in classroom settings and that classroom strategies be developed (including modifications and accommodations) to address performance concerns before formal assessment begins (Flynn, 2013). A formal assessment process should include multiple sources of evidence of language ability (ASHA, 2004b), including observation-based measures (Neisworth \& Bagnato, 2004; Brassard \& Boehm, 2007), authentic assessment (McCauley, 1996), dynamic assessment (Gutiérrez-Clellen \& Peña, 2001; Peña et al., 2006; Austin, 2010), and norm-referenced data (Brassard \& Boehm, 2007). To better reflect current educational practices, a rating scale (the Metalinguistics Profile) has been added to the CELF-5 Metalinguistics tests to enable clinicians to analyze and address teacher and parent concerns about metalinguistic skills in academic settings and social contexts.

This chapter provides information about the Metalinguistics Profile as well as administration of the other CELF-5 Metalinguistics tests to address the referral questions for students who continue to have difficulties related to metalinguistic skills (e.g., making multiple inferences, identifying and interpreting multiple meanings in words and sentences, recognizing and using figurative language, and producing pragmatically appropriate sentences within a given context) after a variety of classroom interventions have been implemented. The tests you administer enable you to determine if the student's performance in the classroom is related to metalinguistic deficits, provide a description of the student's language skills across content areas, and reveal his or her metalinguistic strengths and weaknesses.

CELF-5 Metalinguistics has been developed and researched to enable clinicians to use each group of items independently of the others. Consequently, each group of items that makes up CELF-5 Metalinguistics (e.g., Making Inferences, Conversation Skills) is referred to as a test. Each test can be administered individually to obtain scaled scores. The norm-referenced information provided by each test, evaluated in conjunction with the Total Metalinguistics Index score, Meta-Pragmatics Index score, and Meta-Semantics Index score, other test results, observations of the student in multiple contexts, and portfolio assessment can provide you with the information needed to assist in the identification of a language disorder and to help you determine a student's eligibility for services. Although the test scores provide valuable normative information, the Index scores (Total Metalinguistics Index score, Meta-Pragmatics Index score, and Meta-Semantics Index score) provide the most reliable and diagnostically sensitive norm-referenced measures of a student's language performance by age, which quantitatively supports the student's eligibility for special services.

The tests that form the Meta-Pragmatics Index score and the Meta-Semantics Index score help describe a student's language and, when present, the nature of a student's language disorder. These Index scores provide a broader, quantitative view of a student's language abilities than do the individual test scores. By deriving the Meta-Pragmatics and Meta-Semantics Index scores, you can determine a student's strengths and weaknesses in specific metalinguistic areas and support diagnostic decisions with greater reliability and sensitivity. The item and error analysis tables that are in the Record Form for each test provide additional information about a student's performance and response patterns, enabling further extension testing and/or information for intervention.

## General Testing Guidelines

You should have experience or training in administering, scoring, and interpreting results of standardized tests and in-depth knowledge of English language structure rules before attempting to administer or interpret CELF-5

Metalinguistics. You should also have experience or training in testing children, adolescents, and young adults whose ages, linguistic and cultural backgrounds, and clinical history are similar to those of the students you plan to assess with CELF-5 Metalinguistics. Refer to ASHA's Cultural Competence in Professional Service Delivery position statement for more information (ASHA, 2011).

Before you administer the tests included in CELF-5 Metalinguistics:

- Study the administration and scoring directions thoroughly for each test you will be administering.
- Practice administering the test.
- Review basic information about the student's language skills (e.g., referral data, teachers' observations, parents'/caregivers' report).
- Ensure that you are ready to present the administration directions for each test and verbal stimuli for each item as specifically printed in this Examiner's Manual and in the Record Form.

Follow all instructions precisely to make appropriate comparisons and interpretations based on the standardization results. Failure to follow standardized administration procedures invalidates the standard use of the normative data for interpretation. Exceptions to this are discussed in the Special Testing Considerations section in this chapter.

Obtain additional evidence to support CELF-5 Metalinguistics test results by collecting information about the student's use of language in social and academic contexts. This can be accomplished by collecting a language sample (in both languages if the student is bilingual); extension testing; parent/caregiver and teacher interviews; and observations of the student in the classroom, on the playground, and in other situations where the student interacts with others.

## Testing Environment

Administer CELF-5 Metalinguistics in a quiet, well-lit room that is free from interruptions and distractions. Sit next to the student at a table so the Stimulus Book is easily visible to both the student and you. If you are right-handed, sit on the student's right side. If you are left-handed, sit on the student's left side. This seating arrangement enables you to control the visual stimuli and to observe and record student responses while keeping your writing hand and the Record Form out of the student's direct view. Alternatively, you and the student could sit at right angles across the corner of a table, but make sure the Record Form is not visible to the student.

## Encouragement/Reinforcement

Establish and maintain rapport with each student you test, especially with students who are not familiar with testing situations. This will facilitate a student's interest and cooperation during testing. While you are administering CELF-5 Metalinguistics, do not tell the student if his or her responses are right or wrong, or how many items he or she answered correctly. You may make general comments or reinforcing statements such as, "We're almost done" or "I like the way you're working."

## Repetitions

Repetition of the verbal stimuli is allowed on all tests, as noted in this Examiner's Manual and in the Record Form. Items may be repeated at the student's request, or when it appears that the student was not attending during presentation of that item. Inattentive students may be moving excessively (fidgety, squirmy, swinging legs, etc.) or may be distracted by some other sound or sight. They may also look out the window, yawn, rub their eyes, etc. If inattentive behaviors impede the administration of CELF-5 Metalinguistics, you may want to stop administration at the end of a test and continue after a break. Do not repeat an item when the first response to that item is incorrect.

## Rest Periods/Breaks

If the student needs a short break (e.g., for a drink of water or a restroom break), do not stop in the middle of a test. Take the break at the end of a test, so as not to interrupt its administration. If you must take a break during a test, it may or may not be necessary to readminister the demonstration and trial items when you resume, depending on the

[^2]test being administered, the student's age, and your clinical judgment. Ensure that the student remembers the task before continuing testing.

## Extension Testing

After testing and interpreting CELF-5 Metalinguistics results, you may want to use extension testing to learn more about the factors that may have contributed to a student's errors. His or her errors may result from task or format novelty, task complexity, length or complexity of instructions, linguistic content of test items, or type of response required. By systematically varying the content, directions, and responses required, you can establish conditions under which the student can perform successfully. Results of extension testing enable you to make judgments about the degree of difference between the conditions under which the student is able to perform the skill proficiently, and his or her performance in academic and real-life situations.

Note. When extension testing, use test items missed by the student to determine the level of support needed for success. Although the results may lead directly to intervention strategies, it is not appropriate to use test items (i.e., teach to the test) during intervention.

## Cultural Diversity

Each student you test comes to the testing situation with a unique profile of skills and behaviors influenced by cultural background and life experiences. The term cultural diversity does not refer specifically to racial/ethnic group affiliations; it also refers to individuals who have cultural experiences that vary from mainstream, middle-class cultures. For example, the students you test may include individuals who speak dialects of American English other than Mainstream American English (MAE), come from family units other than a two-parent household, practice religions considered non-mainstream by some, or have experiences associated with a culture of poverty or social isolation.

The great diversity and dynamic nature of American culture and the many languages spoken in the United States preclude compiling a complete list of testing considerations for students from various linguistic and cultural backgrounds. When evaluating or making intervention recommendations for a student from a non-mainstream cultural or linguistic background, be sensitive to any issues that may affect that student and his or her family in order to provide the most appropriate and accurate assessment. ASHA (2011) has stated that professionals need to obtain professional competence by developing cultural competence. Experts describe a number of different factors related to test administration and interpretation that clinicians should be aware of to obtain accurate test results and make appropriate recommendations for students, adolescents, and young adults from culturally and linguistically diverse backgrounds (ASHA, 2011; Battle, 2012; Brassard \& Boehm, 2007; Charity Hudley \& Mallinson, 2011; Kohnert, 2008; Westby, 2000; Wyatt, 2012; Wyatt et al., 2001).

Differences between your communication style and that of the student you are testing may cause misinterpretations of verbal and nonverbal communicative behaviors and, ultimately, result in scores that do not truly reflect the student's language abilities. If you have limited experience assessing culturally and linguistically diverse populations, there are a number of useful resources available. ASHA's Cultural Competence Checklists (2010) can be used to heighten your awareness about how you view students from different cultural backgrounds and how to adapt services to appropriately serve individuals from non-mainstream populations.

When working with culturally and linguistically diverse populations, recognize that you will obtain the best information for making a diagnostic decision if you:

- Determine how familiar the student and student's family are with mainstream cultural values and attitudes.
- Learn about family attitudes towards disability and treatment.
- Learn about the narrative style and pragmatic behaviors of the student's culture.
- Understand second language acquisition patterns.
- Understand the diagnostic process to differentiate a language difference from a language disorder.
- Include students and families in the decision making process.

Students from culturally and linguistically diverse backgrounds may show a lack of familiarity with item contexts (pictures, vocabulary, questions, and topics) and tasks. There may be test items that reflect values and beliefs that are culturally specific and do not apply to the background of the student. To increase the opportunity for a student to give his or her best performance during testing, you may find it helpful to administer the CELF-5 Metalinguistics using accommodations, such as:

- Explaining to the student the reason for being tested.
- Allowing extra time for responses.
- On trial items only, demonstrating, repeating, prompting for responses, and providing correct responses.
- Increasing the number of trial (practice) items.
- Continuing to test beyond the ceiling. (Do not award points for items beyond the discontinue point, even if the student's responses would have earned credit.)
- Supplementing test results with language sampling, observations, parent/caregiver or teacher interviews, and/or dynamic assessment to provide additional evidence of the student's language skills.

When using these accommodations with a student, use of the normative data is appropriate.
There may be times when, in your professional opinion, accommodations do not appear to be eliciting a best performance from the student. You may choose to modify the CELF-5 Metalinguistics test procedures to determine if alternative ones improve the student's performance. Modifications to the CELF-5 Metalinguistics procedures might include:

- Rewording test instructions.
- Asking a student to explain incorrect responses.
- Presenting administration instructions in both English and the student's first language.
- Using alternative scoring procedures, such as giving credit to a response obtained after you have provided additional prompts or administered the item in the student's first language.

When the standardized test procedures are modified, use of the normative data is not appropriate, and the student's performance should be used only as descriptive information in your report of test results.

Additional suggestions for test modification and adaptation can be found in Brassard \& Boehm (2007), Carter et al. (2005), Kohnert (2013), and Roseberry-McKibbin (2002, 2008). Note that any modifications, while useful for minimizing cultural diversity concerns, may invalidate the norm-referenced scores. After testing a student with a modified administration of CELF-5 Metalinguistics, it is important to include a description of the modifications made in your assessment report. Because you cannot report normative test scores, you will have to use a more descriptive approach in reporting the student's responses and reactions during testing. It is important to include a cautionary statement about the limits of using a descriptive approach and provide descriptions of the adaptations and modifications you made during testing (Kohnert, 2013).

## Dialectal Variations

Student responses may contain regional and cultural patterns or variations that reflect dialects of American English (AE) other than Mainstream American English (MAE). Responses on the Making Inferences, Multiple Meanings, and Figurative Language tests are scored for logic and overall meaning, so variations in either grammar or vocabulary do not impact the scores on these tests.

On the Conversation Skills test, responses are scored according to several criteria, including syntax, semantics, and pragmatics. Therefore, when a dialect other than MAE is used, the clinician must be familiar with the language used in the student's home and community to determine if a response is appropriate for that student. If a response is appropriate for the student's language background, score it as correct. Selected dialectal patterns suggested by several researchers are presented in Appendix $G$ and may be helpful to you when determining if a response on one of the Conversation Skills items contains usage of a particular dialect pattern or rule.

Bryant (2009) cautions clinicians not to assume that a student is a dialect speaker because of his or her background or ethnicity. It is important to be aware that students who speak a dialect other than MAE may not apply all of the dialect

[^3]rules consistently. Unless the student is immersed in an environment in which everyone speaks the dialect, the student will be exposed to individuals who model the dialect pattern and individuals who model MAE. Furthermore, if you are not a dialect speaker, the student may feel uncomfortable using the dialect with you and may attempt to switch to MAE, in which he or she may be less proficient. For more detailed information about assessing students who speak a dialect other than MAE, refer to Bryant (2009), Owens (2008), Roseberry-McKibbin (2002), and Wyatt et al. (2001).

## Special Testing Considerations

Students with special needs, such as motor, sensory, or cognitive impairments, are frequently referred for language evaluation. Depending on the impairment and the tests administered, you may need to adapt administration procedures to accommodate the student's needs; otherwise, the test results may not represent his or her true language ability. For example, a student with visual impairment will be at a disadvantage if he or she has difficulty seeing the stimulus pages.

Many variations in administration do not change the standardized test stimuli or procedures and, therefore, do not affect scoring. For example, if a student with visual impairment needs more time to scan the stimulus pages containing text, the norm-referenced scores are still appropriate.

You can adapt any of the tests for students with special needs using the administration procedures as described in the Cultural Diversity section of this chapter. If modifications are made, use the test raw scores only as information about the items presented (e.g., completed 6 out of 12 Making Inferences items correctly). Use the test results to provide qualitative information about the student's language abilities. In your assessment report, describe the language behaviors that the student can and cannot do with specific modifications. Reports of test performance from non-standard administration must indicate the conditions under which the test was administered. Raw scores should not be translated to scaled scores, standard scores, percentile ranks, or age equivalents when a nonstandard test administration has been used.

## Testing for Reevaluation

IDEA $(1997,2004)$ legislation mandates that a student be reevaluated at least once every 3 years unless the parent and the lead or local education agency agree it is unnecessary. However, there are times when you will need to reevaluate a student's language skills before the 3-year mandate. Depending on the length of time between the initial test and the reevaluation, testing with the same test may raise concerns about practice effects. Practice effect is a term used to describe a gain in score points from test to retest, which is a result of learning from the administration of the initial test, and not from an increase in the ability assessed by the test. A CELF-5 Metalinguistics test-retest study used an interval of 1-4 weeks between test administrations for the purpose of establishing the stability of test scores, not to identify an appropriate retest time interval. See Chapter 3 of the Technical Manual for a report of this study. The shortest test-retest interval that will not result in significant practice effects on CELF-5 Metalinguistics has not been determined. In light of that, consider these factors when making retest decisions:

1. Retesting can be conducted when, in the opinion of the clinician, the student is not likely to remember the test items and/or his or her responses when tested previously. If retesting is required prior to this time, changes in performance should be interpreted in comparison to mean differences between original and retest scores obtained in the test-retest study (see Table 3.4 in the Technical Manual).
2. Retesting can be conducted when the clinician thinks the student has made progress since the previous test administration.
3. Retesting can be conducted when the student's age at testing requires the next-age norms table to convert raw scores to scaled scores.
4. Retesting can be conducted when other factors negatively affecting the student's performance (e.g., illness, inattention) cause you to question the accuracy of previous test results.

If you are retesting to measure progress, see the discussion in Chapter 3 of this Manual regarding the use of Growth Scale Values.

## Test Components

You will need the following components to administer CELF-5 Metalinguistics:

- Stimulus Book
- Record Form
- Examiner's Manual, Chapter 2


## Getting Acquainted with the Testing Materials

Complete administration directions and verbal stimuli for item administration are included in this Manual, including additional item prompts and information about allowable response times. Abbreviated administration directions and verbal stimuli for demonstration, trial, and test items are included in the Record Form. Read from the Record Form or the Stimulus Book while keeping the Stimulus Book in front of the student. This arrangement enables you to easily read verbal stimuli from either the Record Form or the Stimulus Book, observe the student's responses, and record the responses in the Record Form. In addition, keep this chapter open when testing in case you need information about additional item prompts, allowable response times, or scoring.

## Abbreviations Used in the Test Components

(Example: MI Demo = Making Inferences, Demonstration Item)

| $1,2 \ldots$ | Item number |
| :--- | :--- |
| CI | Confidence Interval |
| CS | Conversation Skills |
| Demo | Demonstration Item |
| FL | Figurative Language |
| MI | Making Inferences |
| MM | Multiple Meanings |
| MP | Metalinguistics Profile |
| MPI | Meta-Pragmatics Index |
| MSI | Meta-Semantics Index |
| TMI | Total Metalinguistics Index |
| Trial | Trial Item |

## Calculating Chronological Age

Record the student's information, including his or her chronological age, on page 1 of the Record Form before you begin testing. To calculate the student's chronological age, subtract the student's birth date from the test date, using the following rules:

1. When borrowing days of the month, always borrow 30 days, regardless of the month.
2. When borrowing months, always borrow 12 months.
3. Do not round the student's age to the next year.

For example, the chronological age of a student tested on September 18, 2014 and born on September 20, 2004 is 9 years 11 months 28 days (see Figure 2.1).The student's age is not rounded up to 10 years 0 months, so you would compare this student to age-level peers by using the norms tables for students age 9:6-9:11.

Figure 2.1 Calculating Chronological Age


Do not round up to next month or year.

## Demonstration and Trial Items

Before administering any test items, administer the demonstration and trial items so the student can practice the task and become familiar with the stimuli. If the student gives no response, is unable to respond to the trial items, or doesn't understand the task, use the demonstration and trial items as an opportunity to teach the test task. Encourage, demonstrate, repeat, prompt for responses, and provide correct responses to these items as necessary. If the student is still unable to respond to the trial items or doesn't understand the task, do not administer that test.

## Test Order

You may administer the CELF-5 Metalinguistics tests in any order; however, it is recommended that you begin testing with either the Making Inferences or the Figurative Language test. During the early research phases of test development, Conversation Skills and Multiple Meanings appeared to be more challenging tasks for the students when administered first; this initial difficulty might result in a student becoming discouraged early in the assessment and could interfere with his or her ability to provide his or her best performance.

## Recording and Scoring Responses

Because recording responses verbatim can be time consuming, you may want to make an audio recording of the administration of some of the tests for later transcription and scoring. Before you begin, make sure that the recording device is in good working order and that the volume control is set at an appropriate level.

## Self-Corrections

Sometimes a student will revise his or her response to a test item, or self-correct. If the student changes his or her response before you present the next test item, write down the revised response as the student's choice and score it.

## No Response

If a student does not respond to an item even after allowable prompts, or if the student says "I don't know" or a similar response, score the item as 0 .

## Start Points, Reversal Rules, and Discontinue Rules

CELF-5 Metalinguistics includes age-dependent start points and reversal rules for two tests (Multiple Meanings and Figurative Language), and discontinue rules for four tests (Making Inferences, Conversation Skills, Multiple Meanings, and Figurative Language). The start points and reversal rules ensure that the majority of the students experience success on the first items they encounter; the discontinue rules shorten testing time and help minimize student fatigue
or boredom. Start points, reversal and discontinue rules, and repetition guidelines are located at the beginning of each test in the Record Form and in this Examiner's Manual.

## Start Points

For the Making Inferences and Conversation Skills tests, all ages start at Item 1. For the Multiple Meanings and Figurative Language tests, students ages 9:0-12:11 start at Item 1, and students ages 13:0-21:11 start at the items shown in the Record Form. Students who are suspected of having a language disorder, regardless of age, should always start at Item 1.

Start Points are indicated in the Record Form by a circled arrow, see Figure 2.2.

Figure 2.2 Start Point Symbol Used in the Record Form


Begin administration of a test at the recommended age-based start point indicated in this Examiner's Manual and in the Record Form. When you start testing at the age-based start points shown for students 13:0-21:11 in the Multiple Meanings and Figurative Language tests, and the student obtains a perfect score on the first two test items administered, award full credit for all items prior to the start point and proceed with the remaining test items. A perfect score means the full credit available for the item in that test (i.e., 2 points for items in the Multiple Meanings test, 3 points for items in the Figurative Language test.)

For example, the start point for the Multiple Meanings test for students ages 13:0-21:11 is Item 4. Figure 2.3 shows a student, age 15:3, who obtained a perfect score on Items 4 and 5 of the Multiple Meanings test and continued testing with Item 6. The clinician awarded full credit for Items 1-3. Note that scores are not circled for Items 1-3. Instead, a slash and 6 are written in the Item 3 score space. This notation allows you to distinguish between items that were not administered but received credit, and items that were actually administered.

## Reversal Rules

If a student does not begin with Item 1 and he or she does not obtain a perfect score on the first two items administered on the Multiple Meanings and Figurative Language tests, go back to Item 1 and administer all items before the start point. A perfect score is the maximum amount of score points available on an item. On Multiple Meanings, the maximum item score is 2 points. On Figurative Language the maximum Total Item score is 3 points; the Total Item score is the sum of the scores obtained on the open-ended and multiple-choice parts of an item.

Once you have applied the reversal rule and gone back to Item 1, proceed with testing but do not readminister any items. Skip previously administered items and continue testing beyond that point until you have met the discontinue rule or have completed the test. If a student's start point is Item 1 on a test, there is no need to apply the reversal rule.

In Figure 2.5, a student age 14:11 taking the Multiple Meanings test scored 2 points on the start point Item 4, but 1 point on Item 5. The clinician reversed to Item 1 and administered Items 1-3. Items 4 and 5 had already been administered, so the clinician proceeded to Item 6 to continue testing.

## Discontinue Rules

Discontinue rules indicate where to stop testing and are designed to minimize testing time without losing information about a student's abilities. Discontinue rules for each CELF-5 Metalinguistics test are described in this chapter, as well as at the beginning of every test in the Record Form.

In Figure 2.6, a student age 10:5 obtained item scores of 0 on Items 7-9 in Multiple Meanings, meeting the discontinue rule of three consecutive item scores of 0 points.

Do not discontinue a test prematurely. If you are unsure how to score a response and cannot decide if you should discontinue testing, administer additional items until you are certain the discontinue rule has been met. When adding the Total Item scores to determine the test raw score, you find that you administered items beyond the point at which you should have discontinued testing, do not award points for the items beyond the correct discontinue point, even if the student's responses would have earned credit.

## Test Administration

Complete administration directions for all CELF-5 Metalinguistics tests are included in this chapter. Each test description includes (1) the start point and the reversal, repetition, and discontinue rules as appropriate; (2) a list of the materials needed; (3) a statement of the test objectives; (4) what the performance results may mean in relation to a student's school curriculum and classroom activities; (5) what the implications of a student's performance are for intervention; (6) the administration, recording, and scoring directions; (7) directions for completing the item and/or error analysis; and (8) extension testing suggestions.

# Test Administration Directions 

## Metalinguistics Profile

> Fill out the Metalinguistics Profile after you have observed and/or tested the student. When you are unsure how to rate a skill or behavior, ask the student's parents/caregivers, teachers, or other informants who know the student for their input. Discuss examples of each listed skill with the informant. Only the clinician should record the information in the Record Form; the Metalinguistics Profile was not designed to be a questionnaire that is completed by the parent/caregiver, teacher, or student.

## Materials Needed

Record Form
Objective
To obtain information about a student's metalinguistic skills in everyday educational and social contexts. The information complements the evidence of metalinguistic strengths and weaknesses identified by the other tests that comprise the CELF-5 Metalinguistics test battery.

Relationship to Curriculum and Classroom Activities
The skills that are evaluated link to curriculum objectives for metalinguistic skills such as making inferences and predictions, understanding and using figurative language, understanding that words and sentences can have multiple meanings, and exhibiting appropriate discourse skills such as differentiating between situations that require formal and informal registers. As students move from one grade to the next, there is an expectation that their metalinguistic abilities and language competence will increase to keep up with the demands of curricular and non-curricular activities.

## Implications for Intervention

Students who score below average on the Metalinguistics Profile may have difficulty fully accessing the curriculum and/or understanding peer interactions. Item analysis will identify those areas most impacted and provide direction for intervention.

## Completing the Profile

The Metalinguistics Profile is not administered to the student. It is a rating scale that is completed by the clinician with input from parents/caregivers, teachers, or other informants who provide information to assist in the evaluation of a student's language competence and metalinguistic abilities in academic and social settings. The rating scale can be completed before, during, or after administration of the other CELF-5 Metalinguistics tests. Ask or interview the student's parents/caregivers, teachers, or other informants for input to rate the student on skills not observed personally.

## Considering Cultural Background When Rating

Because items in this scale can be culturally influenced (especially those in the Conversational Knowledge and Use section), you must be familiar with expected and culturally-appropriate behaviors for individual students. Make sure that you consider cultural influences in rating the student's nonverbal and verbal communication. You may need to ask the student's parent/caregiver or a consultant familiar with the student's culture if his or her behavior or skill level is expected within that culture.

## Rating the Metalinguistics Profile

For each item, circle the number that best describes how often the student demonstrates that skill or behavior.
1 = Never or Almost Never
2 = Sometimes
3 = Often
4 = Always or Almost Always
Almost has been added to the Never and Always ratings to reflect that these rating categories are not meant to be absolutes. Instead, they reflect that a behavior rated Never or Almost Never means that this behavior is not characteristically part of the student's repertoire/skill set. If you observe a behavior only one time, and it is an exception for the student, the behavior should be rated Almost Never. By the same token, a behavior that is rated Always or Almost Always means that the behavior is typically part of the student's skill set.

Some items may target more than one behavior. For example, Item 1 targets understanding and use of abstract words. When rating a student, you may have observed or obtained information that indicates that the student understands many abstract words and concepts (in other words, the student has almost achieved mastery), but his or her spoken language (i.e., use) doesn't reflect that knowledge. In this case you would circle the observed behavior in that item that is farthest from mastery (e.g., uses) and rate that behavior so that it is clear that mastery has not been fully achieved on this item.

## Scoring the Metalinguistics Profile

The score for each item is the rating (number) that was circled to describe the frequency of occurrence of each skill: $1=$ Never or Almost Never, $2=$ Sometimes, $3=$ Often, $4=$ Always or Almost Always. Sum the scores for each column in the Subtotals area after the last item of the profile. Combine the subtotals and write the total in the raw score box in the Record Form.

## Item Analysis

The Metalinguistics Profile items are grouped to help you summarize the student's metalinguistic strengths and weaknesses. Review the item ratings by section (Words, Concepts, and Multiple Meanings; Inferences and Predictions; and Conversational Knowledge and Use) and by an aggregate of obtained ratings.

4-point ratings (Always or Almost Always) indicate appropriate development and use of the targeted skills.
3 -point ratings (Often) indicate that the targeted skills are emerging and that the only requirement may be to monitor the student to ensure that development continues.

2-point ratings (Sometimes) also indicate that the skills are emerging, but are not observed as consistently as those skills that are rated 3 points.
1-point ratings (Never or Almost Never) indicate the targeted skills have not been observed, and likely are not developed.

Especially note items that are rated 1, 2, and 3 . The skills targeted in items that are rated 1 are likely targets for direct intervention. The skills targeted in items that are rated 2 are likely targets for either direct or indirect intervention, and the skills targeted in items that are rated 3 are likely targets for monitoring and rechecking for continued development. The 1- and 2-point scores will be of most concern. For these items, use the item analysis area on the Record Form to categorize specific areas of weakness (e.g., Vocabulary, Conversational Repair/Redirection). Doing so can assist you in further identifying specific intervention targets.

Figure 2.7 shows a completed Metalinguistics Profile as an example of recording responses.

## Making Inferences

| Start Point <br> All ages: Item 1 | Reversal Rule <br> None | Repetitions <br> Allowed | Discontinue Rule <br> Discontinue after three <br> consecutive Total Item <br> scores of 0. |
| :--- | :--- | :--- | :--- |
| Materials Needed |  |  |  |
| Record Form <br> Stimulus Book |  |  |  |
| Objective |  |  |  |

To evaluate the student's ability to identify and formulate logical inferences on the basis of existing causal relationships or event chains presented in short narrative texts.

Relationship to Curriculum and Classroom Activities
The meta-pragmatic abilities evaluated in this test relate to curriculum objectives for classroom language, speaking, listening, and literacy for students in third grade and above. These objectives require students to be able to identify, understand, and form meaning from implied information in spoken and written discourse. The ability to identify and understand implied information presented orally, in stories and in descriptive, expositive, or argumentative texts is important for creating meaning in social contexts and for achieving academic success (Norbury \& Bishop, 2002; Adams, Clarke, \& Haynes, 2009).

## Implications for Intervention

If the student receives a below average score, you can analyze his or her errors according to the categories in the item and error analysis tables. The student's item and error response patterns provide evidence of the student's metalinguistic and metapragmatic awareness skills that are inadequate for understanding implied information. Interventions that focus on accessing relevant world knowledge to support the identification of missing (implied) information and making logical inferences have proven effective (Norbury \& Bishop, 2002). Developing or modeling cognitive strategies associated with, for example, critical thinking (e.g., analysis, synthesis, evaluation, and application; asking why questions) also support this metalinguistic skill (Roth, Speece, \& Cooper, 2002; Benelli, Belacchi, Gini, \& Lucangeli, 2006; Nash \& Snowling, 2006; Larsen \& Nippold, 2007; Pressley, 2000).

## Administration Directions

Each Making Inferences item consists of two parts: multiple choice and open-ended. The multiple-choice part of the item requires the student to select the best two of four options that explain why something happened. The openended part of the item requires the student to give another reason why something could have happened.

All verbal stimuli for administration of the demo and trial items, as well as the introductory information for the Test items, are printed both in this Manual and in the Record Form. All Test items are presented in the Record Form. The accompanying visual stimuli for all items is in the Stimulus Book. Depending on the student's age and the testing situation, you may decide to point to each possible multiple-choice response option (e.g., a-d) in the Stimulus Book as you read it.

Note. Because you will be unable to score the open-ended items as you administer them, make sure to administer enough Test items to meet the discontinue rule.

## Demo

Say, People often tell us about things that happen, but they don't always tell us why they happen. Then we have to guess for ourselves. Turn to the MI Demo page and say, For example, this morning my Uncle Freddy sent me a message that said (point), "I was hoping to wash my car today. I guess I'll wash it tomorrow." I figured out a couple of reasons why my Uncle Freddy couldn't wash his car today: it was raining, or he didn't have enough time.

## Trial

Turn to the MI Trial page and say, Listen to this one. The students had to go safely outside for a fire drill. After the fire drill, Amy and Gary were called to the principal's office. Now l'll read four other sentences that could explain why Amy and Gary were called to the principal's office. I want you to select the two (stress) sentences that best (stress) explain what could have happened. You may read your choices aloud to me, point to them, or say the letters of your choices.

Amy and Gary were called to the principal's office after the fire drill because:
a. They talked loudly during the drill.
b. They walked out of the building quietly.
c. They ran outside instead of walking.
d. They both have a parent who is a firefighter.

Which two choices best explain what could have happened? If the student only selects one response, say, Remember, choose two reasons that best explain what could have happened. For the Trial Item only, read the correct answers if the student doesn't respond or does not choose the two correct answers.

Say, Now I want you to think of and tell me a reason other than the ones listed here why Amy and Gary could have been called to the principal's office. For the Trial Item only, if the student does not respond, give them some other plausible reasons (e.g., They shoved some of the other kids to get outside faster; they did so well that the principal wanted to thank them for being such good role models; or, they were trying to climb on the fire truck while they were outside.).

## Test Items

Say, Now, I will read some more sentences to you and ask you to choose two reasons that best explain why somebody could have said something or why something could have happened. Then I will ask you to tell me another reason why somebody could have said something or why something could have happened. I can repeat the sentences if you ask me to.

## Test Item Prompts

If necessary for the multiple-choice part of each item, present the item stimuli and say, Which two choices best explain what could have happened? If the student only identifies one response choice, say, Choose two reasons that best explain what could have happened.

On the open-ended part of each item, if the student's response is a repeat of one of the multiple-choice response options (i.e., a-d), say, Remember, give me a reason other than the ones listed here why . . . (repeat the rest of the item prompt). If the student keeps giving you reasons that are repetitions of the multiple-choice response options, even after you have prompted him or her twice to do otherwise, record subsequent repetitive responses without further prompting.

## Response Times

Allow 10 seconds for the student to respond to each part of the trial item and 15 seconds for each part of the test items.

## Recording and Scoring Responses

For the multiple-choice part of each Making Inferences item, check the boxes next to the letters corresponding to the student's responses. Correct responses are in bold in the Record Form. If the student provides the two correct responses, circle 1. Circle 0 if the student gives only one correct response, two incorrect responses, or no response.

For the open-ended part of each Making Inferences item, write the student's response verbatim in the space provided. Use the scoring rules described in Tables 2.1 and 2.2 to score responses as 2, 1, or 0 . If the student does not respond, write NR and score as 0 .

## Scoring Rules for the Verbatim Responses

Table 2.1 contains the general rules, or scoring key, for the verbatim responses obtained on the open-ended part of the Making Inferences items. Table 2.2 contains multiple examples of verbatim responses that earn 2, 1, and 0 points. The examples under each score point are divided into the categories described in the Scoring Key; these categories can help you decide how similar responses should be scored.

Table 2.1 Making Inferences Verbatim Responses Scoring Key

| Score | Rule |
| :---: | :---: |
| 2 | An appropriate, logical response (does not have to be grammatically perfect but has to get the idea across). |
| 1 | Any of the following: <br> - A response that is vague, slightly confusing, or somewhat incomplete. This includes responses in which one piece of information or one leap in logic is missing to "finish" the thought. <br> - A response that is possible, but not likely given the situation (i.e., a "stretch"). <br> - A response that is a combination of correct and incorrect logic (i.e., it contains one part [a phrase or sentence] that is correct logic and one part that is incorrect logic). |
| 0 | Any of the following: <br> - An illogical response given the scenario. <br> - A response that is a paraphrase or restatement of either the lead-in statements or any of the response options. <br> - A response that is in direct contradiction to the lead-in statements. <br> - A response that requires multiple leaps in logic to connect the question with the response/answer. <br> - Any response that doesn't answer the "why" question being asked (or explain all the non-verbal behaviors). <br> - Any response that's off-topic or doesn't indicate that the student inferred anything from or has ignored the lead-in scenario. |

Table 2.2 Examples of Making Inferences Responses and Scores
Item 1
Tran and Anna were having
lots of fun at the outdoor
concert. They left early.
Tran and Anna left early
because:
a. The band was playing really
terrific music.
b. They had to be home
before dark.
c. They actually never liked
outdoor concerts.
d. They still had lots of
homework to do.

Tell me one more reason why Tran and Anna could have left the outdoor concert early.

Any response that indicates that one/both of them had a change of state (e.g., got sick, hungry, tired, bored, etc.):

- Maybe one of them got sick.
- They got hungry/tired.
- They started to lose interest in the concert.
Any response related to bad weather:
- It started to rain.
- It was getting really cold.

Any response that indicates
their parents wanted them to:

- Their parents called and told them to come home.
- They assumed their moms might be worried.
Any response that indicates
a time limit other than being
home before dark:
■ They had to go to bed.
- They had curfew.
- They had to catch the bus.
Any response that indicates there were insects bothering them:
- Probably because the mosquitoes were getting them.
Any response that indicates that they had something else to do:
- Some friends wanted to meet up afterwards.
- They wanted to avoid traffic.
- They had an emergency.

Any response that indicates
a change in the music,
band, or venue:

- The band quit playing the songs they liked.
- Because it was starting to get too loud.
- It was getting too rowdy/ crowded/unsafe.
- The concert was shortened/canceled.

Any response that is vague, slightly confusing, or somewhat incomplete:
■ They had to be there earlier or they'd be in trouble. (Vague-Where did they have to be?)

- 'Cause they forgot something. (Vague)
- They were sick. (No change of state is indicated.)
■ They felt like it. (Slightly confusing-Even though they were having fun?)
- They had stuff to do. (Stuff is a vague, overused word.)
- Their mom and dad didn't want them to be at the concert. (Incomplete thought-So they left early so they wouldn't be found out?)
- Tran had something to do the next day. (IncompleteDid Tran need to go to bed? Also, "something" is vague.)
- Because they had to pick up the baby. (ConfusingWhat baby?)
- Her parents called. (Incomplete-And told them to come home?)
- Because it was too crowded. (No change of state.)
Any response that is possible, but not likely (a stretch):
- Probably because their car broke down and their dad had to come and get them. (Convoluted logic, but possible that it cut their evening short.)
- Maybe one of the instruments broke \& they had to stop the concert. (Bands usually have replacement strings, etc.)
Any response that is a combination of correct/ incorrect logic:
- Tran got sick but Anna wanted to stay. (First part is logical; second part is at odds with their actions.)

Any illogical response given the scenario:

- The concert was horrible. (If the concert were horrible, it's unlikely that they'd have a lot of fun.)
- The band was playing horrible music. (It's highly unlikely that they'd have a lot of fun.)
Any response that is a restatement or paraphrase of the lead-in statements or response options:
- Because they didn't do homework. (Close to option d.)
- Their parents told them they had to be home early enough so they didn't have to walk in the dark. (Close to option b.)
- They didn't like it. (Close to option c.)
Any response that directly contradicts the lead-in statements:
■ They were not having fun.
Any response that requires multiple leaps of logic to connect question to answer:
- If their mom and dad were at work and they had to leave early because they couldn't pick them up. (Tran and Anna left early because their parents couldn't pick them up? And they had to walk home?)
Any response that doesn't answer the why question (or explain all behaviors):
- Tran and Anna always go to concerts. (Response does not explain leaving early.)
Off-topic/Ignores lead-in statement:
- They kept getting lost.

| Item | 2 Points | 1 Point | 0 Points |
| :---: | :---: | :---: | :---: |
| Item 2 <br> Maria was excited about going on the two-week-long trip with her friends. After only one week, she called her mom and said, "I can't wait to get home." <br> Maria called and told her mom that because: <br> a. She missed being with her family and favorite pet. <br> b. She really needed time alone after all the activity. <br> c. She was having a wonderful time with her friends. <br> d. She was taking lots of great pictures of her friends. <br> Tell me one more reason why Maria could have called her mom after only one week and said, "I can't wait to get home." | Any response that indicates she wasn't having fun or didn't like the trip: <br> - She wasn't having fun. <br> - She didn't want to be on the trip anymore. <br> Any response that indicates that she was on the outs with her friends or just tired of them: <br> ■ She was getting sick/tired of her friends. <br> ■ She got in a fight with her friends. <br> - Her friends were being too loud/mean to her. <br> Any response that indicates the weather or experience was bad: <br> ■ 'Cause the weather was bad. <br> ■ There were lots of bugs. Any response that indicates she was tired, bored, or sick: <br> ■ She was exhausted. <br> ■ She got hurt and didn't want to stay there. <br> - She got bored. <br> ■ She could not sleep well. <br> Any response that indicates she missed something other than her family and pets: <br> ■ She missed her boyfriend. <br> - She missed the food her mom cooked. <br> - She wanted to watch her favorite TV shows. <br> ■ She left her laptop at home and couldn't check her Facebook. | Any response that is vague, slightly confusing, or somewhat incomplete: <br> - She wanted good food. (Incomplete-Response needs more information, such as "and her Mom is a great cook.") <br> - Her parents bought her a new car. (Incomplete-And she found out or was excited about seeing it?) <br> - She forgot she had a project due. (IncompleteAnd felt anxious about getting it done?) <br> - Something bad happened. (Vague-What happened?) <br> - She was having a lot of fun but she was getting tired of everything. (Everything is vague terminology.) <br> - She was probably worried. (Incomplete-Worried about what?) <br> Any response that is possible, but not likely (a stretch): <br> - She had forgotten her favorite blanket. (It's not likely that this would make her cut her trip short by a week.) <br> - Maybe she was muddy and didn't have any more clothes. (Not likely.) <br> ■ She didn't like the swimming pool there. IIt's hard to imagine wanting to come home for that reason alone.) <br> - She wanted to check on her mom. (She's talking to her on the phone.) <br> - She was getting bored seeing the exact same sights day after day. (You usually don't see the same thing over and over on a 2-week trip.) | Any illogical response given the scenario: <br> - Because she really wanted to have fun. (And she would have more fun at home than on this trip? This is illogical without more information.) <br> - Because she was going to get something to eat or shop. (It seems illogical that she wasn't doing that on the trip.) <br> - She had a big project due for school and wanted to finish it. (It seems illogical to cut an eagerly anticipated trip short to finish a project, especially if you knew about it before you left home.) <br> - She had another trip planned after that one. <br> - It was her birthday. <br> - It was her mom's BD. <br> Any response that is a restatement or paraphrase of the lead-in statements or response options: <br> - She was homesick. (Option a) <br> ■ She missed her house. (Too close to homesickoption a.) <br> ■ Because she wanted to go home \& take her dog for a walk. (Option a) <br> - She was bothered because she wanted private time. <br> (Option b) |


| Item | 2 Points | 1 Point | 0 Points |
| :---: | :---: | :---: | :---: |
| Item 2, cont'd. <br> Maria was excited about going on the two-week-long trip with her friends. After only one week, she called her mom and said, "I can't wait to get home." <br> Maria called and told her mom that because: <br> a. She missed being with her family and favorite pet. <br> b. She really needed time alone after all the activity. <br> c. She was having a wonderful time with her friends. <br> d. She was taking lots of great pictures of her friends. <br> Tell me one more reason why Maria could have called her mom after only one week and said, "I can't wait to get home." | Any response that indicates that she couldn't wait to tell or show her mom or family something about the trip: <br> - She wanted to tell everyone about her trip. <br> - So she could show them all the pictures she took. <br> Other logical responses: <br> - She was nervous being with lots of people and away from her family. <br> - She wanted to relax at home. <br> - She thought her family missed her. | Any response that is a combination of correct/ incorrect logic: <br> - She could have gotten hurt and wanted to lay down. (The first part makes sense; the second part is not quite logical.) | Any response that directly contradicts the lead-in statements: <br> - She was tired of being there for two weeks. (The lead-in statement says that she had only been there a week.) <br> - She was about to come back home. (The lead-in statement says she has another week.) <br> Any response that requires multiple leaps of logic to connect question to answer: <br> - She lost her luggage. (And didn't have enough clothes? She couldn't stand it anymore? <br> Response needs more explanation.) <br> Any response that doesn't answer the why question (or explain all behaviors): <br> She was happy. <br> Off-topic/Ignores lead-in statement: <br> - She left on an airplane. |


| Item | 2 Points | 1 Point | 0 Points |
| :---: | :---: | :---: | :---: |
| Item 3 <br> Danny bought meat, potatoes, and salad to make dinner for his parents. Danny went out to dinner with his parents instead. <br> Danny went out to dinner with his parents because: <br> a. His parents had already made plans to go out to eat. <br> b. His parents always loved to eat home-cooked meals. <br> c. His parents really liked the dinner he was preparing. <br> d. His parents said they didn't want to eat at home that night. <br> Tell me one more reason why Danny could have gone out to dinner with his parents instead of making dinner. | Any response that indicates that Danny messed dinner up: <br> - Danny burnt the food. <br> - Danny could have ruined the dinner. <br> Any response that indicates that his parents didn't feel like eating what he was going to fix: <br> - Because they didn't like what he was preparing. <br> - His parents might not have liked the salad he bought. <br> Any response that indicates that his parents don't like his cooking or know he is a bad cook: <br> ■ His parents hate his cooking. <br> - Because his parents were terrified by the idea that he made dinner for them. <br> Any response that indicates it was a special occasion that they wanted to eat out for: <br> - They went out to celebrate his mother's birthday. <br> - It was a special occasion. <br> - It was a holiday. <br> - Their father just got a promotion at work. <br> Any response that indicates that he ran out of time: <br> - He didn't have time to cook the meal. <br> Any response that indicates that he didn't have all the ingredients he needed: <br> - He forgot an ingredient to the meal. <br> - Danny might not have gotten enough of the stuff he needed at the store. | Any response that is vague, slightly confusing, or somewhat incomplete: <br> - They had planned but weren't going to go through with it. (Confusing-What is it? Go through with the homecooked meal?) <br> - He didn't want to fix all the food. (IncompleteResponse needs to include a change of state like he "decided" he didn't want to fix all the food.) <br> - It was less work/easier. (Confusing-This is a true statement, but he already bought the groceries.) <br> - Because it will make them happy. (That may be true, but what about the food?) <br> - He likes to eat in restaurants better than at home. (Confusing because he bought the groceries.) <br> - He is a bad cook. (Incomplete-And his parents know it?) <br> Any response that is possible, but not likely (a stretch): <br> - He didn't finish the meal in time. (You usually don't abandon a meal in midpreparation.) <br> - Danny set the house on fire. (Highly unlikely but a kitchen fire would definitely put a damper on cooking.) <br> Any response that is a combination of correct/ incorrect logic: <br> - He wasn't sure what he was going to cook and burned the food. (First part is incorrect; second part is correct.) | Any illogical response given the scenario: <br> ■ He did not know what he was gonna cook. (That's not true.) <br> - Because Danny didn't know how to cook. (Then why did he shop?) <br> ■ He enjoyed talking with them while eating. (They could do this at home.) <br> - He forgot to make dinner. (After buying the ingredients?) <br> - They are allergic to meat. (Then why did he buy it?) <br> ■ They are vegetarians. (Wouldn't he know that?) <br> - They don't like eating at home. (Then why'd he plan this dinner?) <br> Any response that is a restatement or paraphrase of the lead-in statements or response options: <br> - Because they already had plans to do something. <br> (Option a) <br> - He liked the restaurant his parents chose to eat at. (Option a) <br> - They were going to a famous restaurant. <br> (Option a) <br> - They don't always want to eat at their house. <br> (Option d.) <br> - They wanted to go out instead. <br> (Option d.) |


Item
Item 4
Mrs. Yang rushed out of the house because she was late for work. Two minutes later, she returned to the house smiling.

Two minutes after leaving, Mrs. Yang returned to the house smiling because:
a. Her boss fired her so she came back home.
b. She left her overdue library books at home.
c. She remembered that it was the weekend.
d. Her watch was set an hour early, and she really wasn't late.

Tell me one more reason why Mrs. Yang could have returned to the house smiling two minutes after leaving.

Any response that indicates that she remembered, realized, or forgot that she had the day off, didn't have to work, or it was a holiday:

- She found out the boss didn't want her to go to work that day.
- She forgot that she didn't have to be at work that day.
- She realized it was a holiday.
Any response that indicates that someone contacted her (phoned, texted, etc.) and told her she had the day off:
- Her manager called her and gave her the day off.
Any other logical response:
- She forgot her papers and was laughing at herself for being so forgetful.

Any response that is vague, slightly confusing, or somewhat incomplete:

- Her boss told her to take the day off. (IncompleteResponse needs "he called her and gave her...")
- It was a holiday. (Incomplete-Response needs "she remembered that...")
- She didn't have to work that day. (IncompleteResponse needs "she remembered that...")
■ She might have had a big surprise. (Vague)
- Because it snowed and she couldn't go to work. (Incomplete-Response needs more information.)
- She forgot there was no school that day. (Confusing-Does she work in a school?)
- She forgot to comb her hair. (IncompleteResponse needs "she realized that she..." and something like "and it made her laugh.")
Any response that is possible, but not likely (a stretch):
■ She decided to skip work. (Possible, but a stretch to decide that in two minutes.)
- She won the lottery and she doesn't have to go to work anymore. (Winning the lottery is a stretch, as is finding out in two minutes.)
- Somebody called her and told her they would work for her. (Maybe, but seems unlikely.)
- She found a dozen roses on her front step. (And came back in to put them in water? Response is either unlikely or incomplete.)

Any illogical response given the scenario:

- Her boss gave her a raise/ promotion. (She found out in two minutes?)
■ She forgot she had retired. (She is not likely to forget that.)
- She saw something funny and wanted to tell her husband. (But she's late for work.)
Any response that is a restatement or paraphrase of the lead-in statements or response options:
■ She wasn't really late like she thought. (Option d)
- It might have been really early but all her clocks were wrong. (Option d)
- She could be happy because she can stay the whole weekend off. (Option c)
Any response that requires multiple leaps of logic to connect question to answer:
- She got a good phone call. (Response requires too many logic leaps to connect to the question.)
- There was a note on her car saying she could have the day off. (From whom? This is possible, but very unlikely and requires several leaps in logic.)
- It was a special occasion. (Response requires too many logic leaps to connect to the question.)

Item 5
Carlos patiently waited in line for a hamburger. When he got to the counter, he suddenly said, "Never mind," and left the fast-food restaurant.

Carlos suddenly said and did that because:
a. He got a phone call that he needed to answer in a quiet place.
b. He saw that the hamburgers didn't look very fresh or tasty.
c. He realized that the serving sizes were very large, and the food looked good.
d. The line was moving fast, and the food came really quickly.

Tell me one more reason why when he got to the counter, Carlos could have suddenly said, "Never mind," and left the fast-food restaurant.

## Correct responses indicate that Carlos had a change in either mental or physical state

Any response that indicates that he realized that he didn't have money/enough money:

- He remembered that he didn't have his wallet.
- He realized he forgot his wallet.
- He discovered that he didn't have enough money.
Any response that indicates he remembered/realized/ discovered/forgot that he had something else to do/ someplace to be:
- Because he remembered at the last minute he had to be somewhere else.
- He realized he was already late for his meeting.
- He had other plans that he'd forgotten about.
- He found out he was late for an appointment.
Any response that indicates he had a physical change in state (e.g., had an emergency, got sick):
- He suddenly felt sick.
- He had an emergency and had to leave.
Any response that indicates that he decided to go somewhere else to eat, or he decided to eat something else:
- He decided he wanted chicken instead.
- He decided to eat somewhere else.
- Because he changed his mind and didn't want a burger.
- He decided he wasn't hungry and didn't want fast food.
- He got a craving for something else.

The following responses are incorrect because they do not signal that Carlos had a change of physical or mental state
Responses that leave out the "realization" that he didn't have enough money:

- He didn't have enough money to complete his order.
- He forgot his wallet.

Responses that leave out the
"realization" that he had to do something:

- Because he was late to work/late for a meeting/ appointment/plane.
- He had to meet somebody/be somewhere.
- He had something urgent to do.
- He needed to do something and be on time.
Responses that leave out his decision to eat something else, or that he wasn't hungry anymore:
- He wanted something different/healthier. (Incomplete-Response needs "he decided....")
- He didn't want a hamburger. (IncompleteResponse needs either "he decided..." or "... anymore")
- He wasn't hungry. (Incomplete-Leaves out "anymore," or could be categorized as confusing because why wait in line then?)
Any other response that is vague, slightly confusing, or somewhat incomplete:
- People who worked there were being rude. (Incomplete-And he got fed up or he'd seen enough?)
- He heard people complaining about the quality of their food. (Incomplete-Did he change his mind at the last minute?)

Any illogical response given the scenario:

- He didn't want the food. (Then why was he standing in line patiently? Response would be a 2 if it included something like, "He decided that...")
- The place was very crowded/dirty. Why did he stay so long then and leave when it was finally his turn?)
- 'Cause he finished his food already. (He just got to the counter.)
- He wasn't satisfied with the service. (Then why did he wait patiently in line?)
- The line was too long/ slow. (Then why did he wait patiently?)
- He was in a rush/hurry. (Yet he waited this long.)
- He didn't like the food there. (Then why did he wait in line?)
- Because he was on a diet. (Then why was he there in the first place?)
Any response that is a restatement or paraphrase of the lead-in statements or response options:
- The hamburger probably had too much grease on it. (Paraphrase of option b.)
- The hamburgers could have had raw meat in them. (So they didn't look good/tasty? Paraphrase of option b.)
- His mom was calling him to come home. (Paraphrase of option a.)
Any response that directly contradicts the lead-in statements:
- He realized that things were moving too slowly. (He knew they were moving slowly because he had been waiting patiently.)
- The food wasn't good, and it came in small portions. (How did he know the food wasn't good if he hadn't eaten it yet?)

| Item | 2 Points | 1 Point | 0 Points |
| :---: | :---: | :---: | :---: |
| Item 5, cont'd. <br> Carlos patiently waited in line for a hamburger. When he got to the counter, he suddenly said, "Never mind," and left the fast-food restaurant. <br> Carlos suddenly said and did that because: <br> a. He got a phone call that he needed to answer in a quiet place. <br> b. He saw that the hamburgers didn't look very fresh or tasty. <br> c. He realized that the serving sizes were very large, and the food looked good. <br> d. The line was moving fast, and the food came really quickly. <br> Tell me one more reason why when he got to the counter, Carlos could have suddenly said, "Never mind," and left the fast-food restaurant. | Any response that indicates he either didn't want a hamburger anymore or wasn't hungry anymore or lost his appetite: <br> ■ He didn't want a hamburger anymore after waiting in line so long. <br> ■ He just wasn't hungry anymore. | Any response that is possible, but not likely (a stretch): <br> It was too expensive. (It's possible he couldn't see the prices until he got up to the counter, but unlikely.) <br> - He had to use the restroom. (While this could be true, most people could wait until they placed their order.) <br> - Because he discovered insects in the nearby people's hamburgers. (Highly unlikely, but possible.) <br> Any response that is a combination of correct/ incorrect logic: <br> - He didn't want to wait and decided to eat somewhere else. (First part is illogical since he waited patiently and is at the counter; second part is logical.) | Any response that requires multiple leaps of logic to connect question to answer: <br> There wasn't time. <br> Any response that doesn't answer the why question (or explain all behaviors): <br> - The line must have been really long. <br> Off-topic/Ignores lead-in statements: <br> - Good things come to those who wait. <br> - He didn't know they only served tacos until he got to the counter. (Leadin statements say he's waiting for a hamburger.) |


| Item | 2 Points | 1 Point | 0 Points |
| :---: | :---: | :---: | :---: |
| Item 6 <br> Sherry's dad planned to pick her up from school at 3:45. Sherry walked home from school. <br> Sherry walked home from school because: <br> a. She hurt her ankle during gym class and had to go home. <br> b. She forgot that her dad was picking her up. <br> c. Her dad had car trouble. <br> d. She got out of school at 3:40. <br> Tell me one more reason why Sherry walked home instead of riding home with her dad. | Any response that indicates that she wanted to/liked to walk home: <br> ■ Because she wanted to walk home with her friends. <br> ■ She wanted the exercise. <br> Any response that indicates that it was a nice day: <br> - It was a nice day so she decided to walk. <br> Any response that indicates that her dad was delayed by something other than car trouble: <br> ■ Her dad got in a car crash. <br> ■ Her dad was running late/ working overtime. <br> ■ Her dad had a meeting to go to. <br> Any response that indicates concern for the environment: <br> - It might have been Earth Day and it's bad to use cars on Earth Day. <br> - She thought car pollution wasn't good for the earth. <br> Any response that indicates that her dad forgot: <br> ■ He forgot to tell her he was picking her up. <br> - Her dad forgot to pick her up. <br> Any response that indicates a change of event/schedule status: <br> ■ They had an early release day at school. <br> - Her dad could have called and canceled. <br> - She came home at noon and played hooky. | Any response that is vague, slightly confusing, or somewhat incomplete: <br> - Her parents couldn't pick her up today. (Shift from "dad" to "parents" is slightly confusing.) <br> - He might come late. (Might is confusing.) <br> - Because she had something quick to do after school. (Incomplete and/or confusing-She had to walk to do it?) <br> - She wanted to go by the store before going home. (Confusing-She couldn't ride in the car to go by the store?) <br> - 'Cause she didn't want to. (Confusing-She didn't want to ride in the car or walk home?) <br> - Her dad didn't have the car. (Incomplete-After all?) <br> - Her dad lost track of time. (Incomplete-And forgot her?) <br> ■ Her dad was at the store. (Incomplete-And couldn't come get her?) <br> ■ She wanted to talk to her friends. (Incomplete-And they were walking home?) <br> ■ She was upset. (Incomplete and/or confusing-Was she upset with her dad? Her friends?) <br> - Somebody forgot her. (Somebody is vague terminology.) <br> - Her dad was too tired of work. (Incomplete-Too tired from work to pick her up?) | Any illogical response given the scenario: <br> ■ It was nice outside and her dad didn't want to pick her up. (Response doesn't make sense if the two thoughts are supposed to be connected. Also, her dad planned to pick her up.) <br> - She did not tell her dad. (Tell him what?) <br> - No one else could have picked her up from the bus stop so she had to walk home. (She was going to be picked up; she walked home from school.) <br> - It was faster. (Faster to walk home than go by car?) <br> - She found walking a necessary part of her day. (If true, then why would he ever plan to pick her up?) <br> ■ She wanted to get ready for the party. (What party?) <br> Any response that is a restatement or paraphrase of the lead-in statements or response options: <br> - She didn't have a reminder that her dad was coming. (Paraphrase of option b.) <br> ■ Her dad's car wasn't working. (Option c) |


| Item | 2 Points | 1 Point | 0 Points |
| :---: | :---: | :---: | :---: |
| Item 6, cont'd. <br> Sherry's dad planned to pick her up from school at 3:45. Sherry walked home from school. <br> Sherry walked home from school because: <br> a. She hurt her ankle during gym class and had to go home. <br> b. She forgot that her dad was picking her up. <br> c. Her dad had car trouble. <br> d. She got out of school at 3:40. <br> Tell me one more reason why Sherry walked home instead of riding home with her dad. | Any response that indicates her teacher didn't tell her or didn't know: <br> ■ Her teacher didn't know her dad was picking her up and told her to walk home. <br> - She had a substitute teacher who didn't know her dad was picking her up. <br> Any other logical response: <br> ■ She was mad at her dad. <br> - She didn't want him to pick her up. <br> - She stayed after school. | Any response that is possible, but not likely (a stretch): <br> - She didn't want to wait. (Because her dad was late?) <br> Any response that is a combination of correct/ incorrect logic: <br> ■ She was tired and just wanted some alone time. (First part doesn't make sense because she wouldn't walk if she were tired; second part is logical.) <br> - Because she lived close and wanted to get there faster. (First part makes sense; second part doesn't.) <br> - Because she got out of school early and her dad came at the right time. (The first part makes sense; in the second part the use of right is confusing...maybe means "at the regular time"?) | Any response that directly contradicts the lead-in statements: <br> - She was going to a friend's house instead of going home. (Lead-in statements say that she walked home.) <br> - Her dad said he couldn't drive today. (Lead-in statement says that he "planned to pick her up.") <br> - She got a ride with her mom. (Sherry walked home.) <br> Any response that requires multiple leaps of logic to connect question to answer: <br> - Her dad called. (To say he couldn't pick her up? <br> Response requires too many logical leaps.) <br> Any response that doesn't answer the why question (or explain all behaviors): <br> - She had lots of homework. <br> Off-topic/Ignores lead-in statements: <br> ■ She didn't feel like waiting any longer. (Saying "any longer" indicates she's been waiting a while, but that is not stated.) <br> She doesn't like the bus. |



Item 8
Lisa went to eight different
stores to shop for a special gift for her dad. She came home with a frown on her face.

Lisa came home with a frown on her face because:
a. Her dad had never given her a special gift.
b. She couldn't decide what to get her dad.
c. There were not enough gift choices at all those stores.
d. She didn't have enough money to buy what her dad wanted.

Tell me one more reason why Lisa could have come home with a frown on her face.

Any response that indicates that she couldn't find anything special or the stores didn't have what she wanted to buy him or what he wanted:

- There was a perfect gift but it wasn't at any of those stores.
- Maybe what her dad wanted was sold out.
- There was nothing special at the stores.
- The stores didn't have exactly what she wanted.
- She didn't find anything that she thought he would like/want. (The key here is "she thought.")
Any response that indicates that she lost her wallet or the gift, or got robbed:
- Because she lost her money/her credit card.
- Someone stole the gift.
- She forgot/lost the gift she bought him at the mall.
Other logical responses:
- There were so many things, but she could only get one.
- She bought something but had broken it.
- She was tired.

Any response that is vague, Any illogical response given slightly confusing, or somewhat incomplete:

- Because a person got the shirt before her. (Confusing-She wanted to buy a shirt for her dad and someone else got it?)
- The stores were crowded. (Incomplete-And she was aggravated?)
- Maybe she was trying to trick her dad into thinking she didn't get anything. (Most of the time, you don't tell somebody that you're going to shop for a special gift for them, so "trying to trick" him is a little confusing.)
- She couldn't get him what he wanted. (Why? The stores were out of it?)
- She wondered if he would really like the gift she bought. (Incomplete-She was frowning because she was worried?)
Any response that is
possible, but not likely (a stretch):
- Maybe she didn't find a card to go with it. (She had a very specific card in mind?)
- She couldn't find a gift. (In eight stores? Response needs to include something about "the thing she was looking for.")
- She bought something she really didn't want to get him. (Because she couldn't find the precise thing she was looking for?)
- There was nothing he liked. (At eight stores? Response needs to include that she couldn't find exactly what he wanted for a 2.)
Any response that is a combination of correct/ incorrect logic:
- Her dad was too busy to come over and she lost his gift. (The first part is irrelevant; the second part is logical.)


## the scenario:

- There was nothing to buy him. (At eight stores?)
- Her dad didn't give her enough time to pick something out. (She went to eight stores; that takes time.)
- There was a really good thing she always wanted for herself but couldn't get it. (But she's shopping for her dad.)
- Her dad did not like the present. (The item doesn't say she gave it to him yet.)
- The store she wanted to shop in went out of business. (But she had seven other stores to shop at.)
- Because she got her dad something. (Something he might not like?)
- Because she might have gotten in trouble at the store. (The item mentions eight stores. She was in trouble at the last one she went to?)
Any response that is a restatement or paraphrase of the lead-in statements or response options:
- She wanted something very special. (The lead-in statement says that she was shopping for a special gift.)
- 'Cause her dad never got her nothing. (Option a)
- She didn't have enough money. (Option d)
- The gift she wanted wasn't on sale. (And therefore was too expensive? Option d)
- The stores didn't have a good selection. (Option c and illogical for eight stores)

| Item 8, cont'd. |
| :--- |
| Lisa went to eight different |
| stores to shop for a special |
| gift for her dad. She came |
| home with a frown on her |
| face. |
| Lisa came home with a frown |
| on her face because: |
| a. Her dad had never given |
| her a special gift. |
| b. She couldn't decide what |
| to get her dad. |
| c. There were not enough gift |
| choices at all those stores. |
| d. She didn't have enough |
| money to buy what her |
| dad wanted. |
| Tell me one more reason why |
| Lisa could have come home |
| with a frown on her face. |


Item 10
Rosie exercised by running
every morning before every morning before breakfast. On Friday, she told her dad, "I'm going walking before breakfast."

Rosie told her dad that because:
a. She'd hurt one of her legs while running on Thursday.
b. She really didn't care if she was late to breakfast.
c. Her friend didn't run but wanted to walk with her.
d. Her alarm didn't go off, and she overslept on Friday.

Tell me one more reason why, on Friday, Rosie could have told her dad, "I'm going walking before breakfast."

Any response that indicates that she didn't feel like it, was tired of running, or wanted to do something else:

- Because she wanted to do something different.
- She's bored with running now.
Any response that indicates she was tired/lacked energy/didn't feel well enough to run:
- Didn't feel good enough to run.
- She didn't have the energy to run.
Any response that indicates that she had extra time to walk:
- She woke up early so she had more time for walking.
Any logical weather-related response:
- It was too hot for running.
- The paths had ice on them so she wanted to go slower.
- It could have been a nice day and she didn't want to just run through it.
Any response that indicates she felt temporarily lazy :

■ She felt lazy that day.

- She was in a lazy mood.

Any other logical response:

- She wanted to relax because it was Friday.
- Because she still wanted to exercise, but not that hard.
- She forgot her running shoes at school.
- She wanted to save her energy for gym class.

Any response that is vague, slightly confusing, or somewhat incomplete:

- Because she just didn't feel like it. (Incomplete-
She didn't feel like running?)
- Because she got up extra early. (Confusing-So she had more time to walk?)
- Maybe she has asthma. (Incomplete-And couldn't run that day?)
- She wanted to enjoy the scenery. (Confusing-You can do that while running, too.)
- She wanted to let her dad know. (Incomplete-That it would take her longer than usual?)
- So her dad wouldn't get worried. (Incomplete-If it took her longer?)
- She was bored or something. (IncompleteBored with running?)
- Bad things were happening at her house and she wanted to take a while to think. (Incomplete-Response requires a logical leap that walking takes longer, so she'll have more time to think.)
- She was lazy. (IncompleteClearly, she's not a lazy person because she runs every day, so response would have to add something like "that morning.")
- Lazy day. (IncompleteWas she having one?)
Any response that is possible, but not likely (a stretch):
- She had a stomach ache the night before. (Maybe, but if she doesn't have one now, why walk?)

Any illogical response given the scenario:

- She didn't want to be late for school. (Response is illogical as walking takes more time than running.)
- She's trying to be healthier. (One activity isn't healthier than the other.)
- She wasn't hungry. (The item doesn't imply she's going to miss breakfast.)
- She was trying to lose some weight. (Running would serve the same purpose.)
- She doesn't like breakfast so she'd be happy to skip it. (She's still eating breakfast after her walk.)
- She wanted some alone time. (She can run alone, too, so this is illogical without something else added such as: "She wanted more alone time.")
Any response that is a restatement or paraphrase of the lead-in statements or response options:
- Her legs were sore from running. (Too close to option a.)
- She might have gotten hurt the day before. (Too close to option a.)
- She was sore. (Too close to option a and vague.)
- Her bones hurt. (Too close to option a.)
Any response that directly contradicts the lead-in statements:
- She goes walking on Fridays. (Lead-in statement says she runs every day.)
- Because she does every other day and she was consistent. (Lead-in statement says she runs every day.)

| Item | 2 Points | 1 Point | 0 Points |
| :---: | :---: | :---: | :---: |
| Item 10, cont'd. |  | Any response that is a combination of correct/ incorrect logic: | Any response that requires multiple leaps of logic to connect question to answer: |
| every morning before breakfast. On Friday, she told her dad, "I'm going walking before breakfast." |  | - She wanted to get some time alone but was too tired to run. (First part is illogical because she would get time alone regardless; second part is | - A little head's up (She's giving her dad a head's up? That she'll be late for breakfast? Response requires too many logic leaps.) |
| Rosie told her dad that because: |  | regardless; second part is logical.) | Any response that doesn't answer the why question |
| a. She'd hurt one of her legs while running on Thursday. |  |  | (or explain all behaviors): <br> - She was going walking |
| b. She really didn't care if she was late to breakfast. |  |  | Off-topic/Ignores lead-in statements: |
| c. Her friend didn't run but wanted to walk with her. |  |  | So she could get some exercise. |
| d. Her alarm didn't go off, and she overslept on Friday. |  |  | - Maybe she was pretending to go walking |
| Tell me one more reason why, on Friday, Rosie could have told her dad, "I'm going walking before breakfast." |  |  | somewhere else. |

Item 11
Tina waited more than half
an hour for her friend after an hour for her friend after school. When she came home, Tina said, "I don't want to talk to anyone," and turned her phone off.

Tina did that because:
a. She didn't want her aunt to call her.
b. She was angry and didn't want to listen to excuses.
c. Her friend hurt her feelings by not meeting her.
d. She had to help her friend with his homework.

Tell me one more reason why Tina could have said, "I don't want to talk to anyone," and turned her phone off.

Any logical response:

- Maybe her friend finally showed up and they had an argument.
- Because after waiting that long she needed to get home and do work.
- Tina was tired from waiting for her friend.
- Tina had messed up the meeting place with her friends and was embarrassed.
- She didn't want to get into a big fight with her friend.
- She finally talked to her friend so she did not need her phone anymore.

Any response that is vague, Any illogical response given slightly confusing, or somewhat incomplete:

- Something bad could have happened. (To her friend?)
- She figured out her friend didn't meet her and went with someone else. (And she was upset?)
- Because she had something else to do. (Use of else makes this confusing.)
- She wanted to be alone. (For what reason?)
- Maybe because her and her friend talked a lot so her throat was hurting.
(Confusing-After her friend showed up, did they talk too much?)
- She didn't have time to talk to anybody. (Incomplete-Because she'd lost time waiting for her friend?)
- 'Cause she hated waiting. (And was irritated?)
- Her friend disappointed her. (By being late? By not calling?)
- Her friend was being mean. (Vague)
- Maybe she had to do her homework and did not want to be distracted. (By her friend calling?)
- Her friends made other plans \& left her there waiting. (She found out and she was upset?)
- Her and her friend got in a fight. (When he/she finally showed up?)
- Her friend made a bad joke out of her. (By not showing up?)
- She was tired. (Of waiting?)


## the scenario:

- She got in a fight with Tina. (She is Tina.)
- Because her phone did not work in her room. (Response doesn't explain what she said.)
Any response that is a restatement or paraphrase of the lead-in statements or response options:
- Just didn't want to talk (This is said in the lead-in statement.)
- She was upset/frustrated. (Paraphrase of option b.)
- She was annoyed. (Paraphrase of option b.)
- She was upset with somebody and didn't want to talk to anybody. (Paraphrase of lead-in statement and option b.)
- She was sad and depressed. (Paraphrase of option c.)
- Her friend ditched her. (Paraphrase of option c.)
- Because Tina had waited for her friend for nothing. (Paraphrase of option c.)


| Item | 2 Points | 1 Point | 0 Points |
| :---: | :---: | :---: | :---: |
| Item 12 <br> Jan was looking forward to her first job review. Her boss started the review by saying, "I don't know where to begin." <br> Jan's boss said that because: <br> a. Jan's boss forgot what he was going to say during her review. <br> b. Jan's boss doesn't like doing job reviews and waited until the last second to begin. <br> c. Jan's boss didn't know how best to tell her that she wasn't doing a good job. <br> d. Jan's boss had so many good things to tell her, he didn't know what to start with. <br> Tell me one more reason why Jan's boss could have started the review by saying, "I don't know where to begin." <br> Note. This item could be biased against students who don't know the difference between an interview and a performance/job review. Do not penalize responses that confuse the two as long as they answer the why question. | Any response that indicates that Jan's boss wasn't prepared/lost or forgot his notes or that his notes were confusing/unclear: <br> - Because he didn't plan it out before she came. <br> - Because he lost/forgot his notes and didn't know where to start. <br> - He was disorganized. <br> - He had not taken a close look at her resume and didn't have a whole lot of background info. <br> Any other logical response: <br> - Her supervisor gave her good marks but her fellow employees did not. <br> - Jan's boss was going to fire her. <br> - The boss was nervous because he'd never done a review before. | Any response that is vague, slightly confusing, or somewhat incomplete: <br> - Because he was lost of all the things he was going to say. (Confusing-He lost everything or he forgot what he was going to say?) <br> ■ It was the boss' first time being a boss. (IncompleteSo he was nervous?) <br> - Because he doesn't wanna hurt her feelings. (Incomplete-Because he didn't have good things to say?) <br> - Maybe the boss forgot he was doing the review. (Incomplete-And wasn't prepared?) <br> - He had other things on his mind. (Incomplete-So he was distracted?) <br> - He was confused. (About what?) <br> ■ The boss was nervous. (Incomplete-About what?) <br> Any response that is possible, but not likely (a stretch): <br> - The boss was intimidated by her. <br> Any response that is a combination of correct/ incorrect logic: <br> - He's really mean and he is going to fire her. (The first part doesn't make sense because if he's mean he'd know exactly what he was going to say; the second part is logical.) | Any illogical response given the scenario: <br> - She had so much stuff piled into the interview that she had too much and the boss had to deal with everything and he didn't know where to start. (The pronoun confusion makes the entire sentence difficult to figure out if Jan had too much information. Illogical.) <br> - He was going to give her a promotion/raise. (It seems like he'd know how to begin to give her great news.) <br> Any response that is a restatement or paraphrase of the lead-in statements or response options: <br> - Because she has many bad qualities so he didn't know how to tell her. (Paraphrase of option c.) <br> - He didn't know where to start whether he was telling her good or bad news. (Paraphrase of options c and d.) <br> - There were a lot of things to tell her. (Response is vague because it doesn't imply either good or bad things. Less info than option d.) <br> ■ He didn't know where to begin. (That's what the leadin statement says.) <br> - He didn't know what to say. (That's a paraphrase of the lead-in.) <br> - Because she was doing a horrible job. (Paraphrase of option c.) |


| Item | 2 Points |
| :--- | :--- |
| Item 12, cont'd. | Point |

Jan was looking forward to her first job review. Her boss started the review by saying,
"I don't know where to begin."

Jan's boss said that because:
a. Jan's boss forgot what he was going to say during her review.
b. Jan's boss doesn't like doing job reviews and waited until the last second to begin.
c. Jan's boss didn't know how best to tell her that she wasn't doing a good job.
d. Jan's boss had so many good things to tell her, he didn't know what to start with.

Tell me one more reason why Jan's boss could have started the review by saying, "I don't know where to begin."

Any response that is a restatement or paraphrase of the lead-in statements or response options, cont'd.:

- Her review could have been filled with so many things, good and bad. (This is a paraphrase of both $c$ and d .)
- Too many things to say. (Paraphrase of d.)
- He forgot. (Option a.)

Any response that directly contradicts the lead-in statements:

- The review was over. (He had not started.)
Any response that requires multiple leaps of logic to connect question to answer:
- They didn't have a lot of time. (For the review? So he felt rushed and, therefore, didn't know where to begin?)
Any response that doesn't answer the why question (or explain all behaviors):
- He's mean and doesn't treat Jan nice. (Response doesn't explain why he said that.)
Off-topic/Ignores lead-in statements:
- He didn't know anything about running a restaurant.


## Deciding if the Discontinue Rule Has Been Met

Because each item consists of two parts, multiple-choice and open-ended, you must sum the scores on each part to get a Total Item score. This is the score to use when trying to determine if the student has reached the discontinue rule of three consecutive Total Item scores of 0 . Refer to Figure 2.6 for an example of a correct discontinue.

## Computing the Test Raw Score

Compute the test raw score for Making Inferences by separately adding each score point $(3,2,1)$ of the Total Item scores and recording the sum of each score point in the appropriate column of the Subtotals area. The two Subtotals areas are located at the end of the Score column on pages 5 and 7 of the Record Form. Combine the values recorded in the two Subtotals areas and record the total (i.e., from the test Raw Score box) in the area provided on page 7 of the Record Form. If you choose for diagnostic purposes to administer items beyond the last item meeting the discontinue rule, do not include those scores while computing the raw score for the test.

## Item Analysis

The Making Inferences test provides several ways to analyze both the types of items missed by the student and the types of errors made by the student. These analyses will help you determine your extension testing and/or intervention strategies.

On the multiple-choice part of the Making Inferences items, you can analyze the items by error type (e.g., Inference Contradicts Scenario; Inference is Related, but Not Key). To do so, circle the incorrect response options selected by the student. This will help you determine if the majority of incorrect inferences made by the student fall into a single category or multiple categories. This information can help you determine the type of information the student was focused on or missed entirely when listening to the test stimuli. Knowing this can help you decide appropriate intervention strategies for students whose inferencing skills are below average.

On the open-ended part of the Making Inferences items, you can analyze the student's responses by item type, error type, or both. Note that some items are in more than one category (Pragmatic, Semantic, Linguistic). To analyze the open-ended part of Making Inferences by item type, circle the item numbers with open-ended responses scored as 1 or 0 . Analyzing the items this way will help you determine the types of inferences that the student is having difficulty with.

To analyze the open-ended part of the Making Inferences by error type (e.g., Possible but Not Likely, lllogical), find the open-ended responses scored as 1 or 0 and circle the types of errors the student made. Note that the categories in this error type table are the same categories included in the 1 and 0 point columns of Table 2.2.

## Extension Testing

Review of the completed item analyses will provide information about factors that contribute to the student's below average performance. For example, a student whose responses are frequently restatements or paraphrases (Error Category - 0 point responses in the Making Inferences Error Analysis: Open-Ended Responses table) may not have the flexibility to generate different situational outcomes. In comparison, a student whose responses do not answer the "why" question, are off-topic, and/or ignore the lead-in statements may have difficulty mapping which noun or noun phrase goes with the pronoun referents (i.e., anaphors) within scenarios. The Making Inferences Item Analysis: OpenEnded Responses table provides further information as to whether a student's errors reflect misunderstandings (or lack of understanding) of emotional, causal, or anaphoric referents.

By extension testing, you can more closely observe the student's responses and identify factors that introduce difficulties for him or her. This can be achieved by a) discussing familiar schemas for each situation, b) prompting for alternate outcomes, c) interpreting contextual cues (key elements) within each situation, and/or d) guiding the student to an anaphor's reference.

## Conversation Skills

| Start Point <br> All ages: Item 1 | Reversal Rule <br> None | Repetitions <br> Allowed | Discontinue Rule <br> Discontinue after three <br> consecutive item scores of 0. |
| :--- | :--- | :--- | :--- |

## Materials Needed

Record Form
Stimulus Book

## Objective

To evaluate the student's ability to (a) initiate a conversation or respond in a way that is relevant and pragmatically appropriate to the context and audience while (b) incorporating given words (semantic units) in semantically and syntactically correct sentences.

## Relationship to Curriculum and Classroom Activities

The meta-pragmatic abilities evaluated relate to curriculum objectives for classroom language, speaking, listening, and literacy for students in third grade and above. These objectives require students to be able to successfully take part in conversations in varied contexts and with various conversational partners, make effective choices for meaning according to context, describe intentions and thoughts, and evaluate responses by characters to given situations. The same meta-pragmatic skills that facilitate effective oral expression have been shown to apply to written expression (Myhill \& Jones, 2007; Troia, 2011). Writing may be viewed as a form of communication for social purposes aimed at achieving social interaction goals (Troia, 2011).

## Implications for Intervention

If the student receives a below average score, you can analyze his or her errors according to the categories in the item and error analysis tables. The student's item and error response patterns provide evidence of meta-pragmatic skills that are inadequate for social communication and literacy. Explicit teaching about using language as a tool has proven important for literacy development (Achugar, Schleppegrell, \& Oteíza, 2007; Enright, 2013; Fang \& Schleppegrell, 2010). Interventions that focus on establishing fundamental linguistic skills for formulating compound and complex sentences often required when speaking in discourse genres such as conversation have also proven effective (Bishop \& Donlan, 2005; Marinellie, 2004; Scott \& Windsor, 2000). An example of this type of intervention is sentence combining, which develops syntactic complexity and flexibility (Nelson, 2010). Assigning peer models, peer tutoring, and structured role-playing are among other approaches to intervention that have proven effective (Brinton \& Fujiki, 2006; Hess \& Fairchild, 1988; Nelson, 2010).

## Administration Directions

Each Conversation Skills item is open-ended. Because you must write the student's response verbatim for each item, you may find it helpful to audio record administration of this test and use the recording to help verify responses when scoring. Before testing, make sure that your recording equipment is working properly and that the volume control is loud enough to capture all responses.

Note. Because you will be unable to score items as you administer them, make sure to administer enough Test items to meet the discontinue rule.

## Demo

Say, Have you ever walked into a place where people were talking and you only heard a few words? When you only hear a few words of a conversation, there are many ways the words could have been put together. (Pause) I'm going to show you a picture. Then l'll use three words to make a sentence that someone in the picture could say.

Turn to the CS Demo page and say, Look at this picture. A girl and her friend are sitting on the front steps, and the girl's father is in the window. They were talking and one of them used these three words (point to them): Pam (pause), late (pause), dinner (pause). The dad could have said, "Pam, don't be late for dinner." (Point to the words in the order that you say them.) Or the girl could have asked her friend, "Would you like to join us for a late dinner, Pam?" (Point to the words in the order that you say them.) Then say, Here's another one.

## Trial 1

Turn to the CS Trial 1 page and say, Here's a picture of two students in a school hallway. Listen to the words I heard one of them say (point to them): don't (pause), leg. Tell me a sentence one of the students could have said using the words don't, leg. Make sure your sentence is about the picture and that all the words are in it. The words can be used in any order.

If the student produces a sentence with the two words, say, That was a good sentence. If you used the words in a different order, you could say, . . . (make up a sentence that uses the words in a different order to emphasize the fact that the words can be used in any order). Proceed to the test items.

If the student can't produce a sentence with the two words, say, The girl could have said, "Don't fall and hurt your leg!" Or, the boy could have said, "I hurt my leg, so I don't think I should hang any more of these banners." Point to the words in the order that you say them in each sentence. For the trial items only, if the student does not use the target words or changes a word (e.g., legs for leg), say, Remember to use these words (point to and say them) in your sentence.

## Test Items 1-3

Introduce Test Items 1-3 by saying, Now, I'll ask you to make some more sentences. Turn to the CS Item 1 page and say, Here are some people talking . . . (say the situation printed after each item number in the Record Form). Here are the words I heard. Read the words with a short pause between each one while pointing to them. Tell me a sentence that one of the people in the picture could have said using these two words. Make sure your sentence could be used in the situation and that both words are in it. The two words can be used in any order. I can repeat the situation or the words if you need me to.

## Trial 2

Turn to the CS Trial 2 page and say, Let's try one with three words. Here's a picture of a coach and her students in the gym. Here are the words I heard one of them say (point to them): basketball (pause), fun (pause), easy. Tell me something one of them could have said using these three words. Remember, you can use the words in any order, but it must be something that someone in the picture could say.

If the student produces a sentence with the three words, say, That was a good sentence. If you used the words in a different order, you could say, ... (make up a sentence that uses the words in a different order to emphasize the fact that the words can be used in any order). Proceed to the next test item.

If the student can't produce a sentence using the three words, say, One of the girls could have said, "I think it's fun and easy to play basketball." Or, the coach could have said, "Basketball will be easy and fun if you practice." Point to the words in the order that you say them in each sentence. Proceed to the next test item.

Test Items 4-17
Say, Let's do some more.

## Test Item Prompts

If a student asks you to tell him or her what one of the stimulus words mean, say, Just do the best you can with what you know.

Once the student understands the test task, you may present the situation (e.g., at the ice cream store) and the stimulus words (e.g., chocolate, and) without the introductory text (i.e., Here are some people talking. . . [situation]. Here are the words I heard.).

[^4]
## Response Times

Allow 10 seconds for the student to respond to the trial items and 15 seconds for the test items.

## Recording and Scoring Responses

Record the student's responses verbatim in the space provided for each item in the Record Form. Use the General Scoring Rules and Scoring Procedures, as well as Tables 2.3 (Scoring Key) and 2.4 (Examples of Conversation Skills Responses and Scores) to score each item as 2, 1, or 0 points.

## General Scoring Rules

Use the following rules to score Conversation Skills items:

- The target words must be used correctly (according to the target structure requirements and 2-point examples in Table 2.4) in the response for a student to earn a score of 2 . If all 2 or 3 target words are not used, score the item as 0 .
- The target words must be used as presented; tense and plurality may not be changed. For example, a response using practiced instead of practice for Item 3 earns a score of 0 . Exceptions to this rule include:
- Conversational or colloquial use substitutions for a target word, such as:
- Item 1 ' $n$ ' for and
- Item 9 afore for before
- A target word may be used in a possessive form (e.g., job's for job in Item 6, or cat's for cat in Item 10).
- A target word may be used in a contracted form (e.g., mightn't for might in Item 4).
- A contracted target word may be used in uncontracted form (e.g., do not for don't in Trial 1).
- The semantic meaning of the target words must not be changed. If the meaning of a target word is changed, score the item as 0 . For example, a response on Item 13 of "Nonetheless is a tough move" earns a score of 0 because "nonetheless" is being used as a noun instead of an adverb/sentence connector.
- The response must be part of a credible dialogue between or among the people pictured. If the response is not something one of the people in the picture could have said that is appropriate for the pictured context, score the item as 0 .
- Dialogue can be indicated as follows:
- Can I please have banana and chocolate?
- The lady asks, "Can I please have banana and chocolate?"
- What flavors do you want? She's gonna answer chocolate and vanilla.
- If the response does not fit the pictured context, score as 0 . For example, on Item 15, the response, "Napkins are difficult to unfold unless you have help." earns a score of 0 because it does not fit the pictured context (i.e., completely ignores what's going on in the picture).
- Regional and cultural patterns or variations that reflect dialectal differences from Mainstream American English (MAE) should be credited if they are appropriate for the student's language background.
- Responses may be in the form of questions or statements.
- If two or more sentences are given in response to an item, score only the sentence that contains the stimulus words. Give credit for only that sentence and do not score the sentence that does not contain the stimulus words. Do not add scores for the two sentences.
- The exception to this rule is sentences that can be joined by a comma or semi-colon. In this case, score them as one sentence. This is especially true on Items 10 (however), 13 (nonetheless), and 14 (regardless). For example, on Item 13, the verbatim, "This is tough. Nonetheless, we have to go now." can be scored as one sentence because the sentence could be written using a semi-colon after the word tough. Another example is on Item 10, "We're inside. However, that cat is outside. Both of these examples would be scored 2 because the sentences could be joined using a semicolon.
Note. If the student does not say the sentences back-to-back, but has a lengthy pause between them, use your judgment to decide if they should be scored as one or two sentences.
- Misplaced modifiers cause confusion because they are not close to the words they modify. Subtract 1 point if it is not clear what is being modified or if it causes confusion.
- Certain pronouns (e.g., this, that, it) may be used without a referent if it fits the pictured context. For example, on Item 15 (napkins-difficult-unless), a response such as "This will be difficult to clean up unless we get napkins." is scored as 2 because the pictured context is three students looking at a spilled drink. An example where this rule does not apply is on Item 1 where the woman is pointing at a display case with 12 containers of ice cream. Responses such as "I'll take some chocolate and that" or "Can I get some of this and chocolate" are vague and would require the girl behind the counter to ask for more information about which flavors are wanted; therefore, these responses should be scored as 1 .


## Scoring Procedure

Follow this sequence to score Conversation Skills items:

1. Look at the stimulus picture.
2. Read the response and look for the 2 or 3 target words.

- If the sentence does not contain all of the target words, score the item as 0 .
- If the sentence contains all of the target words, continue scoring.

3. Decide if the response is part of a credible dialogue between the people pictured.

- If not, score the item as 0 .
- If it is, continue scoring.

4. Decide if the response uses the target word(s) correctly according to the examples of Conversation Skills responses and scores provided in Table 2.4.

- If the sentence does not demonstrate the target word requirements, score 0.
- If the sentence uses the stimulus words as described in the requirements, continue scoring. Decide if there are syntactic or semantic errors in the sentence. If so, count the number of errors and assign a score according to the key in Table 2.3.

Note. A good rule of thumb for scoring Conversation Skills responses is this: if you have to think about whether a response is correct, it is probably not a 2-point response. In other words, a response that requires a great deal of thought to understand the meaning or message of the sentence does not meet the requirements of a full credit (2 point) response.

Table 2.3 Conversation Skills Scoring Key

| Score | Rule |
| :---: | :--- |
| 2 | No syntactic, semantic, or pragmatic errors. <br> Uses all the required target words in the correct forms. <br> The message of the sentence is clearly communicated. |
| 1 | 1 or 2 syntactic, semantic, or pragmatic errors. <br> Uses all the required target words in the correct forms. <br> The message of the sentence may be initially difficult to determine. |
| 0 | 3 or more syntactic, semantic, or pragmatic errors; any sentence fragment that is not conversationally <br> appropriate; an illogical sentence; a missing or misused target word; no response. |

Table 2.4 provides the target word requirements as well as examples of 2-, 1-, and 0-point responses for each item. Each score category is based on the number of errors in the response; in addition, the reasons for the 1-and 0-point scores are noted in parentheses. Not all possible error types are presented in the table. Some item responses may be examples of dialectal responses other than Mainstream American English. When scoring responses as dialectal variations, use your clinical judgment. Refer to Appendix G for more information about patterns of responses expected for speakers of African American English, Spanish-Influenced English, and Asian-Influenced English.

## Difference from CELF-5 Formulated Sentences Scoring

Although many of the scoring rules for Conversation Skills are similar to those of the CELF-5 Formulated Sentences test, there is one major difference. If the target words are not used within the context of a conversation or dialogue taking place between the characters in the pictured scene, the item should be scored as 0 points. This is different from the Formulated Sentences test, where the target words need only to be used in a sentence that is a comment about the picture.

Table 2.4 Examples of Conversation Skills Responses and Scores

| Item | Target Structure <br> Requirements | Score 2 | Score 1 | Scor |
| :---: | :---: | :---: | :---: | :---: |
| General Rules | noun: names a(n) person/ animal, place, or thing (e.g., leg, chocolate, toast, job, corn, napkins, cat, week) <br> pronoun: a word used in place of a noun; it refers to a noun elsewhere in the context (e.g., some) <br> reflexive pronoun: refers back to the subject of the sentence <br> (e.g., myself [I]) <br> verb: names an action or state <br> (e.g., practice, walk, watch, have, worried) <br> modal auxiliary verb: <br> joins the main verb to express necessity, possibility, etc. <br> (e.g., might) <br> adjective: describes a noun or pronoun (e.g., fun, important, difficult, wrong, tough, some, different, colorful) <br> adverb: modifies a verb, adjective, or another adverb (e.g., easy, carefully, hard, actually, especially) <br> preposition: shows relationships (time, place, position, etc.) of words in a sentence <br> (e.g., inside, before, after, during) | General elements of a score of 2 (ALL of the following must be true): <br> - Demonstrates proper use of all stimulus words in the form given in one complete sentence or in one conversationally appropriate sentence fragment (e.g., <br> "Chocolate and vanilla, please.") <br> - Sentence is part of a dialogue between/ among the characters in the picture and relates to what is going on in the picture. <br> - The response can be a statement or a question and can be stated in the first person. <br> - The response is free of pragmatic, syntactic, and semantic errors and is not vague or awkward. <br> Note. If you have to think about whether it's a 2 , it probably isn't. | General elements of a score of 1 (first 3 elements must be true with maximum of 1-2 error types noted below): <br> - Demonstrates proper use of all stimulus words in the form given in one complete sentence or in one conversationally appropriate sentence fragment. <br> - Sentence is part of a dialogue between/ among the characters in the picture and relates to what is going on in the picture. <br> - The response can be a statement or a question and can be stated in the first person. <br> - 1-2 non-target word errors that fit into one of the error categories described below: <br> Semantic Deviation <br> - Any use of non-target words that is vague, overused, or incorrect (e.g., stuff, thing, that) <br> Syntactic Deviation <br> - Any syntax or morphology error. <br> Pragmatic Deviation <br> - Any response that fits the situation but is slightly "off" somehow pragmatically (i.e., isn't quite what you'd say in the situation) | Reasons to assign a score of 0 (any ONE of the following is a 0 ): <br> Missing 1 or More Target Words <br> - One or more of the target words is not included in the response. <br> Misuse of a Target Word <br> - At least one of the target words is used in a form other than the way it was presented. For example, past tense vs. present tense, plural vs. singular, etc. <br> Two (or More) Sentences <br> - In order to fit all of the target words in, the student uses more than one sentence. (see exception in the General Scoring Rules) <br> Illogical/Nonsensical <br> - The response does not make sense. <br> Doesn't Match/Fit Picture <br> - The response describes something not connected to the picture. |





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| Item | Target Structure Requirements | Score 2 | Score 1 | Score 0 |
| :---: | :---: | :---: | :---: | :---: |
| Item 3, cont'd. |  |  | Vague/Incomplete Thought: <br> - Practice might run late if we are bad. (It is not clear what bad means here. Does it mean play badly or display bad behavior such as being disrespectful? The response is incomplete.) <br> - After this practice, I wonder if we will win or lose. (Will they win the next game? The championship? The response is incomplete.) | Doesn't Match/Fit Picture: <br> - If we practice piano we can get really good. <br> Comment, not Dialogue: <br> - The boy and the girl are wondering if soccer practice is over. <br> Sentence Fragment: <br> - If we lose during practice <br> - If I practice for soccer |
|  |  |  | Awkward: <br> - We won't have soccer practice if it's rained out. (It's is an unclear referent and/or it is repetitive to say, "We won't have soccer practice if it [soccer practice] is rained out.") |  |



| Item | Target Structure Requirements | Score 2 | Score 1 | Score 0 |
| :---: | :---: | :---: | :---: | :---: |
| Item 4, cont'd. |  |  | Mixed Deviations: <br> - Since my bike might be broken, l'll walk. (Broken is the wrong word. Also, might be broken is vague since it's clear the bike is out of commission.) | Comment, not Dialogue: <br> - Since the tire looks bad, the girls are discussing if it might be good to walk. <br> Sentence Fragment: <br> - Since I might walk |
|  |  |  | Vague/Incomplete <br> Thought: <br> - Since I got a flat tire, we might want to walk tomorrow. (Tomorrow adds an incomplete thought, because they are going to have to walk today too.) |  |
|  |  |  | Awkward: <br> - Since my tire popped on my bike, I might walk. (It is awkward to use my twice in the sentence.) |  |





| Item | Target Structure Requirements | Score 2 | Score 1 | Score 0 |
| :---: | :---: | :---: | :---: | :---: |
| Item 6, cont'd. | but-preposition cont'd <br> Note. To be used meaningfully, but needs to contrast statements: <br> To suggest a contrast that is unexpected in light of the first clause: e.g., "Joey lost a fortune in the stock market, but he still seems able to live quite comfortably." | This job stinks, but it's important. <br> This may not be an interesting job, but it is important. <br> This job is hard but important. | Awkward: <br> - This job is important, but you don't have to take it as a full-time job. | Comment, not Dialogue <br> - Boys and girls were doing a job that people thought was important. <br> Sentence Fragment <br> - Our job is really important but |
|  | To suggest in an affirmative sense what the first part of the sentence implied in a negative way: e.g., "The club never invested foolishly, but used the services of a sage investment counselor." |  |  |  |
|  | To connect two ideas with the meaning of "with the exception of" (and then the second word takes over as subject): e.g., "Everybody but David is trying out for the team." |  |  |  |
|  | important-adjective <br> Some people may not think so, but this is an important job. |  |  |  |


| Item | Target Structure Requirements | Score 2 | Score 1 | Score 0 |
| :---: | :---: | :---: | :---: | :---: |
| Item 7 | either-adjective <br> You can have potatoes or a biscuit, but it comes with corn either way. <br> either-correlative conjunction <br> (paired with "or") <br> Your order will have a free side of either corn or potatoes. | - Can I have either corn or potatoes? <br> - I will either have corn or bread. (Bread or rolls is acceptable.) <br> - You can either have | Semantic Deviation: <br> - Could I have either corn or that? (The use of that is vague since it's not clear what she's pointing to.) | Missing 1 or More Target Words: <br> - Either corn or potatoes for me please. (The response is missing have.) |
|  | either-adverb <br> I don't want to have chicken, and I don't want to have corn either. <br> either-pronoun <br> I'd rather have corn than potatoes, but either will do. | You can have either corn or rice. (Rice is acceptable.) <br> - You can have either corn or sweet potatoes. (Sweet potatoes is acceptable.) | Syntactic Deviation: <br> - I would either have corn or chicken. (In this context, the auxiliary verb would expresses a conditional or hypothetical situation. Will should be used.) | Misuse of a Target Word: <br> - Can I have corn either so and so? (Either is used incorrectly.) |
|  | have-verb <br> I can't have either corn or potatoes if they have butter on them. <br> corn-noun | Either you can have corn or something else. (This response is acceptable because it is conversational.) | Pragmatic Deviation: <br> - You can have either corn or green beans, but hurry up and decide. (This is a rude thing for a worker to say to a patron.) | Two (or More) Sentences: <br> - You can either have chicken or potatoes. The corn is extra. |
|  | You can either have corn or potatoes with your meal today. <br> Note. If a food is named that resembles something pictured (e.g., spinach), accept as OK. If something is named that is clearly not shown (e.g., strawberries), count as one deviation. | - Either you can have corn or potatoes. <br> - If you don't want green beans either, you should have corn. | Mixed Deviations: <br> - Can I have either corn or mashed potato? (Potato is a syntactic deviation and should be plural. There is a pragmatic deviation because corn and potatoes are clearly in front of the person asking.) | - Can I have some corn- either mashed potatoes or peas? <br> Doesn't Match/Fit Picture: <br> - Do you have either of these corn choices? (The response doesn't fit the picture and is nonsensical.) |
|  |  |  | Vague/Incomplete <br> Thought: <br> - The decision to either have corn or green beans is a lot for me. (lt is not clear what a lot for me means.) | Comment, not Dialogue: <br> - The woman will have either corn or a biscuit. <br> Sentence Fragment: <br> - Either have the corn |
|  |  |  | Awkward: <br> - I decided to either have the corn or have the potatoes. (lt is awkward to use have twice in the sentence.) |  |




| Item | Target Structure <br> Requirements | Score 2 | Score 1 | Score 0 |
| :---: | :---: | :---: | :---: | :---: |
| Item 9, cont'd. | after-adverb <br> Let's eat before the show rather than after. <br> after-subordinating conjunction (transition of time) <br> l'd rather buy popcorn after going to the bathroom than before. |  | Awkward: <br> - Would you rather eat before I go than after the movie is over. (I go makes this an awkward response.) | Comment, not Dialogue: <br> - After he paid, he decided that he'd rather have his snack before they go out (The response is a comment on the picture, not dialogue.) <br> Sentence Fragment: <br> - I'd rather eat before rather after. <br> 3 or More Deviations: <br> - I rather pay before than after. (The response is missing an auxiliary verb such as would. Also it is missing two words, the and movie.) |



| Item | Target Structure Requirements | Score 2 | Score 1 | Score 0 |
| :---: | :---: | :---: | :---: | :---: |
| Item 10, cont'd. | cat-noun <br> However much it will upset Mom, I'm letting that cat inside. <br> Note. During standardization data collection, there were many responses that indicated that they thought the cat was inside trying to get out. Since the leadin statement introduces the item by saying "While looking outside on a rainy day," count any response that confuses inside and outside as one pragmatic deviation. |  |  | Doesn't Match/Fit Picture: <br> - I'm glad we're inside; however, the cat looks sad. (The student can't see the cat's face to see if it is sad or not. It's also difficult to know what a cat's face looks like when sad. Finally, the two thoughts are not contrasting and/ or require too much inference to make meaning.) <br> - The cat is scratching the door to get inside; however, there is a pet door. (There is no pet door.) |
|  |  |  |  | Comment, not Dialogue: <br> - The kids are inside; however the cat is outside in the rain. <br> Sentence Fragment: <br> - However the cat wants inside. (There is no contrasting statement for however.) |


| Item | Target Structure Requirements | Score 2 | Score 1 | Score 0 |
| :---: | :---: | :---: | :---: | :---: |
| Item 11 | during-preposition <br> I'm worried that if I do something wrong during the experiment, the flask will explode. | - During the lab tell me if you're worried. <br> - During the experiment, raise your hand if you get worried. | Semantic Deviation: <br> - I'll stand here during your experiment if you're worried of failure. Worried about would be a more appropriate phrase than worried of.) | Missing 1 or More Target Words: <br> - I'm worried about it during the test. (The response is missing if.) |
|  | if-subordinating conjunction <br> (transition of condition) <br> Definition: in the event that; on condition that; even though; whether; when or whenever; a condition | I wasn't paying attention during the instructions and I don't know if this is supposed to happen, so l'm a bit worried. | - During the chemistry I'm worried if it might explode. (Chemistry is not the correct word choice. Chemistry experiment would be more appropriate.) | Misuse of a Target Word: <br> - I'm worried that if I mess this up during putting the vinegar with the fire I can have a combustion. (During is used to mean when or while.) |
|  | Synonyms: condition, doubt <br> If you're worried about your results, come talk to me during my office hours. | explode if I add this during the experiment. <br> Don't be worried if you mess up during the experiment. | - If someone touches this during the chilling time I'll be worried. (The chilling time is imprecise vocabulary.) | It worried me that if during the experiment something would happen. (Using both that and if together indicates misuse of if as a conjunction; also, the |
|  | Note. It is acceptable to substitute" "if" to mean "whether" in a response. | experiment is going to blow up during the heating process. <br> If I get worried during this experiment, I might | - If I get worried during experiment, can I call you? (The response is missing the before experiment.) | response sounds like past tense even though the experiment is happening in the present.) |
|  | I am worried about what will happen to my grade if I mess up during this lab experiment. | mess up. <br> During the experiment, if it spills, don't be worried. | Pragmatic Deviation: <br> - During class I might be worried if I'm working with chemicals. (Class is in session, and the speaker is working with chemicals.) <br> - If I put this in during class l'm worried it will explode. (Class is in session.) | Two (or More) Sentences: <br> - Are you worried that you are going to mess up? If so, during the next test you can take a break. |
|  | If I see you with that worried look again during the experiment, I'll come check on you. |  |  | Illogical/Nonsensical: <br> - If I was worried, I will be during the classroom. <br> Doesn't Match/Fit Picture: |
|  |  |  |  | Note. Do not credit a response that includes something along the lines of "tell the teacher." (Who would/could be saying that?) |


| Item | Target Structure Requirements | Score 2 | Score 1 | Score 0 |
| :---: | :---: | :---: | :---: | :---: |
| Item 11, cont'd. |  |  | Mixed Deviations: <br> - Don't play with the chemicals cause if they fall during the experiment, your mom will be worried. (ff they fall is poor word choice and your mom will be worried is a pragmatic deviation. How would she know?) <br> Vague/Incomplete <br> Thought: <br> - If something happens during the experiment, don't be worried. (Something is vague.) <br> Awkward: <br> - Ask any questions during the lab if you are worried. (Use of any is an awkward sentence construction. Ask questions during the lab... is a better construction.) | Comment, not Dialogue: <br> - During the science experience, the boy was worried if the vase would blow up. <br> - During science, I was worried if I was going to spill the experiment. (This response sounds like a retrospective comment. The boy conducting the experiment would not say this in the present moment.) <br> Sentence Fragment: <br> - During science class if you're worried <br> 3 or More Deviations: <br> - I was worried during science if the glass broke. (The scene depicts a present tense action; if the glass broke should be that the glass would break which is 3 errors.) |




| Item | Target Structure Requirements | Score 2 | Score | Score |
| :---: | :---: | :---: | :---: | :---: |
| Item 13 | tough-adjective <br> This is a tough move right now; nonetheless, I'm expecting you to get on board. <br> tough-adverb | This is tough; nonetheless, we have to go now. <br> - Now moving is tough, but nonetheless, it will get better. (Use of but nonetheless together is conversational, so it is not counted as a deviation.) | Semantic Deviation: <br> - It is tough to now leave our old house but nonetheless we will enjoy our new house. (Now is awkwardly placed in sentence.) | Missing 1 or More Target Words: <br> - Even though you are sad now, you will be happy nonetheless. (The response is missing tough.) |
|  | nonetheless, I can see now that this move is affecting you. <br> now-adverb <br> Moving now is tough; nonetheless, we can't wait any longer. | conversational, so it is not counted as a deviation.) <br> It's tough to move; nonetheless, now we can start new. | Syntactic Deviation: <br> - I know it tough now; nonetheless, it's gonna get better. (It should be it's. Gonna is an acceptable deviation and not counted as an error.) | Misuse of a Target Word: <br> - You can be tough; nonetheless, we are moving now. (Nonetheless is not used to contrast two thoughts.) |
|  | now-subordinating conjunction (transition of time) | - I know it is tough now; nonetheless, we will make it. | Pragmatic Deviation: <br> - It may be tough now, but nonetheless it may be better in the future. (The use of may twice is not reassuring.) | - Moving nowadays can be tough; nonetheless we have to do it. (Nowadays is not a proper use of the target word now.) |
|  | Now that moving day is here, I realize how tough | - I know it's tough now, but we're moving nonetheless. |  |  |
|  | this will be; nonetheless I still want to move. <br> now-noun | - I know it's tough to be moving away from your friends; nonetheless, | Mixed Deviations: <br> - I know how it is a tough time for you; nonetheless you can't stop now. (How is a poor word choice, and | - You should be tough now, nonetheless because we are moving. (Nonetheless is not used correctly.) |
|  | Now is the time to make this move; nonetheless, it'll be tough. | it's better to move now than later. |  |  |
|  | nonetheless-adverb (sentence connector) | - It may be tough; nonetheless, moving now is for the best. | poor word choice, and you can't stop now is vague? What can't be stopped?) | Two (or More) Sentences: <br> - This is tough now. Now we have to go to a hotel. This is going to be, nonetheless. (The response is three sentences.) |
|  | [opposition/limitation/ contradiction] | - Moving might seem tough now: | Vague/Incomplete <br> Thought: <br> - It was tough moving now; nonetheless it worked. (The student does not make it clear what worked for whom.) |  |
|  | I know it's tough on you now, but we'll get through it nonetheless. | nonetheless, it will be fun to have a fresh start. |  | Illogical/Nonsensical: <br> - You have to be tough nonetheless now. (The student does not demonstrate understanding of the target words; it appears the words are just strung together.) |
|  | Moving is tough and you may dislike it now; nonetheless, can we agree to give this new place a fair try? | I know it is going to be tough now; nonetheless, at least we made it to our new house. |  |  |


| Item | Target Structure Requirements | Score 2 | Score 1 | Score 0 |
| :---: | :---: | :---: | :---: | :---: |
| Item 13, cont'd. | nonetheless-adverb cont'd <br> Definition: despite what has just been said or referred to; the statement just made does not diminish or make less what comes next; nevertheless; however; despite that; in spite of that <br> Synonyms: however, nevertheless, even so, on the other hand |  | Awkward: <br> - This might be tough for you now; nonetheless you can make it through now. (The second now is not necessary.) | Doesn't Match/Fit Picture: <br> - It may be tough moving now; nonetheless, the cats are going with you. (There are no cats pictured.) <br> Comment/Not Dialogue: <br> - The girl and her dad are making a tough move now; nonetheless, it will get better for them. |
|  | Note. Assume use of "this" and "it" to mean "moving" since that is obviously what's going on in the scene. |  |  | Sentence Fragment: <br> - Nonetheless, moving now is tough (Nonetheless is a connecting word, not a sentence starter. This response is a partial thought and sentence.) |


| Item | Target Structure Requirements | Score 2 | Score 1 | Score 0 |
| :---: | :---: | :---: | :---: | :---: |
| Item 14 | different-adjective <br> I might buy the special edition with a different cover, regardless of the price. <br> different-adverb <br> The magazines might appear different, but they have the same content regardless. <br> might-modal auxiliary verb <br> Definition: less likely, some possibility, less sure | - I might get a different magazine, but it will cost the same regardless. <br> - I might get a different magazine regardless of the reading level. <br> Regardless of my preferences, I might try something different. <br> Regardless of how different those magazines are, I might just like them. | Semantic Deviation: <br> - I might get a different magazine regardless of what it is telling. (Telling is weak vocabulary. The student needed to use about or saying.) <br> Syntactic Deviation: <br> - I might like the magazine regardless that it's different from this one. (The magazine should be this magazine or that magazine.) | Missing 1 or More Target Words: <br> - Regardless, it is different. (The response is missing might.) <br> Misuse of a Target Word: <br> - They might have some different and regardless magazines. (Regardless is used incorrectly.) <br> Two (or More) Sentences: <br> - I might want a different magazine. I like magazines about dolls |
|  | I read different magazines than you might expect, regardless of how well you think you know me. <br> regardless-adverb <br> I might find a different magazine before we check out, but you go ahead regardless. | This is a different genre than you normally read, but regardless, I think you might like it. (Using but and regardless together is acceptable in spoken English.) <br> You might want to try a different magazine regardless of your taste. <br> We might get the same magazine regardless of how different we are. | Pragmatic Deviation: <br> - I am really smart but regardless you might like the different magazines l'm reading. (This response sounds like an insult.) <br> Mixed Deviations: <br> ■ These magazines might be different regardless the cover. (The response contains two deviations. It is missing of as in of the cover. Also, cover should be plural.) <br> - Regardless how many pages there are, this might be different than the magazines you read. (The response needs of after regardless and usually or typically before read.) | Illogical/Nonsensical: <br> - Regardless of different topics the magazines might be the same. (The response is nonsensical. The magazines can't be the same if they are different topics.) <br> - Although these magazines might be different, regardless, they may have something in common. (Nonsensical and/or misuse of regardless with although) |




| Item | Target Structure Requirements | Score 2 | Score 1 | Score 0 |
| :---: | :---: | :---: | :---: | :---: |
| Item 16 | either-adjective <br> Because of some delivery hang-up/problem/mistake, they won't have potatoes for a week in either store location. <br> either-pronoun | We can come back either on Tuesday or Wednesday of this week to get some potatoes. <br> They will have some more potatoes either | Semantic Deviation: <br> - We can come back either tomorrow or next week and get some products. (Products is not the right word. The student may mean produce.) | Missing 1 or More Target Words: <br> - We can either get potatoes later this week or next. (The response is missing some.) |
|  | Given the look of the lettuce and peppers, I'm not sure I want to buy some of either this week. | later this week or next. <br> (The context shows they are in the grocery store, so they is understood.) | Syntactic Deviation: <br> - We can come back either tomorrow or next week and get some | Misuse of a Target Word: <br> They haven't had some either week l've been here. (Some is used incorrectly.) |
|  | Some pests/Weather ruined the potatoes and the yams look terrible, so I'm not buying either this week. | We should get some more potatoes either later this week or next week. | potato. (Potato should be plural.) <br> Pragmatic Deviation: <br> - Either this week or next they should have some | Would you either get some this week or next week? (Either is used to mean rather.) |
|  | either-correlative conjunction | I can come back and get some potatoes either next week or the | potatoes at the grocery store. (At the grocery store is unnecessary | Note. Sometime, something, and somewhere are not |
|  | Definition: works with "or" to join words and groups of words of equal weight | week after that. | since they are in the grocery store.) | acceptable variations of some. |
|  | I'd love some potatoes but every week they are either out of stock or too expensive. <br> either-adverb | or a week before we get some more potatoes. <br> You can either wait a week for the potatoes or get some at | Mixed Deviations: <br> ■ Either I will buy some potato now or next week. (He cannot buy potatoes now because there aren't any in the bin and the student | Two (or More) Sentences: <br> ■ We don't have any potatoes this week. You can come back either next week or some other time. |
|  | Using some of those dehydrated potatoes for our dinner this week won't be tasty or healthy either. <br> week-noun | Either way we'll have to come back this week to get some potatoes. | should have used plural potatoes.) <br> Vague/Incomplete <br> Thought: <br> - We can get some | Illogical/Nonsensical: <br> - I either come here every week or every day, and I still want some potatoes and ham. (The clauses |
|  | I heard some people saying that they won't have potatoes until either next week or the week after. |  | potatoes either this week or next. (The response is missing later this week.) | in this response do not make sense together.) |
|  | some-adjective <br> They had some problems with their potato delivery this week, and they didn't get any yams either. |  | Awkward: <br> - Some more potatoes will come back either tomorrow or next week. (It is awkward to say come back.) | Either week some of the vegetables are cheap. <br> Either they need to get some more potatoes or some more tomorrow or next week. |



| Item | Target Structure Requirements | Score 2 | Score 1 | Score 0 |
| :---: | :---: | :---: | :---: | :---: |
| Item 17 | or-coordinating conjunction [used to link alternatives] Clothes that are either especially colorful or all white should be washed only with similar items. | Be careful when washing colorful or bright clothes especially in hot water. <br> - Be especially careful washing colorful clothes or they might stain the whites. | Semantic Deviation: <br> - You look especially colorful today, or maybe it's new clothes. (The response is missing the word your before new clothes.) | Missing 1 or More Target Words: <br> - Do we put these with the plain or colorful ones? (The response is missing especially.) |
|  | Either my eyes are especially sensitive, or those clothes are very colorful. | - Don't use bleach, especially on colorful clothes, or they'll be ruined. | Syntactic Deviation: <br> - You shouldn't use bleach on especially colorful clothes, or they would be ruined. (There is a tense agreement error. Would should be will.) | - You can't have colorful or white clothes together, especially when they are new. (Or is used as and.) |
|  | Never use bleach or hot water, especially with a colorful load. | - I don't know if the clothes are especially colorful or just clean. |  | - All the clothes are colorful especially the pink one or the green one. (Or is used as and; also, agreement issues with pink one(s) and green one(s).) |
|  | especially-adverb |  | Pragmatic Deviation: <br> - Would you like especially colorful clothes or colorless clothes? (This is an unusual thing to ask.) |  |
|  | Definition: to a great extent; very much | Did you get new detergent or something, because these clothes are especially colorful. |  |  |
|  | Synonyms: exceptionally, notably, particularly, chiefly, specially |  |  | Two (or More) Sentences: <br> - Be careful with the colorful or white clothes. You can't mix them together, especially when you wash them. |
|  | I am especially careful when I wash either colorful or expensive clothes for the first time. |  | Mixed Deviations: <br> - I need to be especially careful washing colorful clothes or you might stain the white. (The response changes from I to you in the second clause and does not have the word clothes after white.) |  |
|  |  |  |  | Illogical/Nonsensical: <br> - Colorful clothes are hard to wash especially whites. |
|  |  |  |  | Especially wash my colorful clothes or all my shirts. |
|  |  |  |  | - Are your clothes especially colorful or am I just being nice? |


| Item | Target Structure Requirements | Score 2 | Score 1 | Score 0 |
| :---: | :---: | :---: | :---: | :---: |
| Item 17, cont'd. |  |  | Vague/Incomplete <br> Thought: <br> - You have to be especially careful not to mix the colorful and whites or the whites will be stained. (The student doesn't specify what colorful and whites are. To be complete the student could say colorful and white clothes.) <br> Awkward: <br> - These especially colorful clothes cannot mix with white clothes or the white clothes will become the color of the colorful clothes. (This sentence has meaning but with an awkward construction.) | Doesn't Match/Fit Picture: <br> - Do you think the pageant will be especially colorful or will it be dull this year? <br> Comment, not Dialogue: <br> - The girl has especially colorful clothes. <br> Sentence Fragment: <br> - Especially the clothes color |

## Deciding if the Discontinue Rule Has Been Met

Discontinue the test after three consecutive item scores of 0 . If you administered additional items because you were not sure if responses would receive a 0 score, do not include those items when computing the test raw score.

## Computing the Test Raw Score

Compute the test raw score for Conversation Skills by separately adding each score point $(2,1)$ and recording the sum of each score point in the appropriate column of the Subtotals areas. The Subtotals areas are located at the end of the Score column on pages 9 and 10. Sum the values recorded in the 2 and 1 columns of the Subtotals areas and record that number in the Raw Score box. If you discontinue the test and choose, for diagnostic purposes, to administer items beyond the last item meeting the discontinue rule, do not include those scores while computing the raw score for the test.

## Item Analysis

Use the item and error analysis tables on the Record Form to determine which item categories the student had difficulty with, as well as common error patterns observed in the student's responses. Circle the number of the items with scores of 1 or 0 .

Analyzing the student's responses by item type provides you with information about content (semantic) and form (syntactic) demands that cause difficulty for the student. Note that items can be in one or more categories. For example, in Item 3, the word practice can be used as either a noun or a verb.

Analyzing the student's responses by error type provides you with information about the types of pragmatic, semantic, and syntactic errors the student makes and some of the strategies the student is using (e.g., changing the form of a word, making two sentences instead of one). Knowing this can help you determine the starting point for extension testing and/or intervention. Note that responses can contain more than one type of error. For example, on Item 5 (watch, carefully, while), the response "Watch me while I jumped carefully on the pool" contains two errors: "jumped" for "jump" (syntactic error) and "on" for "in" (semantic error).

## Extension Testing

Once you have determined which types of items are difficult for the student and/or what kinds of errors (pragmatic, semantic, syntactic) the student is making, you can modify the test task in a methodical way to determine the point at which the student can be successful.

## Vary the Pragmatic Situation

Select the item responses that contained pragmatic errors (e.g., those that are awkward, don't match the pictured scene, are illogical). Discuss the pictured situation (e.g., the children are at a soccer game, the father and daughter are moving) and what the characters might talk about as a result. For example,

## - Item 3. At a soccer game

- Situation: The boy and girl just finished playing a soccer game and are walking off the field. They won the game and now qualify for the championship game. They are excited and are discussing what they can do to win the championship game.
- Talking points that use the target words if and practice:
- If they practice more, they might win the game. What could one of the characters say about this?
- If they miss any practice sessions, their coach might not let them play. What could one of the characters say about this?
- If they are tired, they might have to get some rest before they practice. What could one of the characters say about this?
- Item 13. On moving day
- Situation: The girl is sad about moving away from her friends. She's also worried about going to a new school. Her dad is trying to convince her that everything will turn out okay.
- Talking points that use the target words tough, now, and nonetheless:
- It may be tough to leave the friends she has now; nonetheless, she should be able to meet new friends. What could the dad say about this?
- She likes the school she's in now and thinks going to a new school will be tough; nonetheless, she's a good student and should make good grades at the new school. What could the girl or her dad say about this?
- The dad knows that it's tough to leave their old house right now; nonetheless, their new house is bigger and nicer and the family will like it better once they get settled in. What could the dad say about this?


## Modify the Semantic Content

If the student's responses contain content (semantic) errors, you can modify the test task in several ways.

1. If the student used non-target words that were vague (e.g., stuff, thing), overused (e.g., you know), or incorrect (e.g., box for toaster), talk about those words and other vocabulary that might be used. Then ask the student to revise his or her response to correct those non-target words.
2. If the student's response omitted one or more of the target words, discuss the meaning of each word and have the student make a sentence with each target word individually. Then ask the student to make a sentence using all the target words.
3. If the student misused a target word by changing its meaning, discuss the word's meaning and then ask the student to make a sentence with it. If he or she is successful, add the other target words to see if the student can be successful.

## Modify the Syntactic Complexity

If the student's errors were related to structure (syntax) or morphology, you can modify the test task to determine at what point the student can be successful. For example, you can

- Reduce the number of target words used to formulate a sentence.
- To reduce sentence complexity, omit the target word that is a conjunction (e.g., and, or, if, when). For example, in Item 5, have the student look at the picture and make a sentence that one of the characters could say using the words watch and carefully. Omitting the conjunction while will help you determine if 1) the student can make simple sentences, and 2 ) if including the conjunction is the difficult part of the task for the student.

Next, have the student make a sentence that uses the target conjunction but none of the other words. For example, in Item 5, have the student look at the picture and make a sentence using just the word while. This will help you determine if the student can successfully use the conjunction in a complex sentence without the constraint of the non-conjunction target words.

- If the student changes the form of the target words (e.g., changes carefully to careful, practice to practiced, present different forms of the target words (e.g., careful, carefully; practice, practiced, practicing) and have the student make sentences using the different forms. This will help you determine if the student is more successful using certain forms than others.

Figure 2.9 shows the first two pages of a completed Conversation Skills administration as an example of scoring and recording responses.

## Multiple Meanings



## Materials Needed

Record Form
Stimulus Book

## Objective

To evaluate the student's ability to recognize and interpret different meanings of selected lexical (word-level) and structural (sentence-level) ambiguities.

## Relationship to Curriculum and Classroom Activities

The meta-semantic abilities evaluated in this test relate to curriculum objectives for knowledge of language, language acquisition and use, and literacy for students in third grade and above. These standards require students to be able to detect and interpret multiple word meanings and the contexts within which they are used for listening and reading comprehension. The test also requires students to use syntactic skills to parse sentence types they perceive to contain structural ambiguities; these syntactic skills are acquired later than their semantic counterparts. Evidence suggests that ambiguity detection is correlated to reading achievement (Cairns, Waltzman, \& Schlisselberg, 2004).

## Implications for Intervention

If the student receives a below average score, you can analyze his or her errors according to the categories in the item analysis table. The student's item response patterns provide evidence of meta-semantic or syntactic skills that are inadequate for social communication and literacy. Explicit teaching about identifying word (lexical) or sentence-level (structural) ambiguities supports recognition and interpretation of ambiguous expressions and, in turn, metalinguistic and literacy development (Achugar, Schleppegrell, \& Oteíza, 2007; Enright, 2013; Fang \& Schleppegrell, 2010; Zipke, Ehri, \& Cairns, 2009). Interventions to improve syntactic skills required for resolving sentence-level ambiguities may also focus on establishing grammar skills for parsing simple and complex sentences.

## Administration Directions

Each Multiple Meanings item has at least two meanings. The most common meanings are listed on the Record Form. Keep in mind that the student's responses need to capture the essential meaning (or main idea) of the listed responses; the responses do not have to exactly match the wording on the Record Form.

## Demo

Turn to the MM Demo page and say, Sometimes people say or write something that could have two meanings. If I said, Look at the bat (point to the sentence), it could mean look at the baseball bat or look at the flying animal. That's because this word bat (point to it) means two things-a baseball bat and a flying animal. Let's do another one.

## Trial 1

Turn to the MM Trial 1 page and say, Here's another sentence that means more than one thing (point to it) - Your glasses are dirty. Be careful not to say the stimulus sentence in a way that stresses one word more than another. What two things can the sentence mean?

If the student produces both essential meanings, say, That's right, the word glasses (point to it) means two things, so the sentence, "Your glasses are dirty," can mean the glasses you drink from are dirty, or your eyeglasses are dirty. If the student produces only one or none of the expected responses, say, There are

[^6]two kinds of glasses—drinking glasses and eyeglasses. So, the sentence, "Your glasses are dirty," can mean the glasses you drink from are dirty, or your eyeglasses are dirty.

## Trial 2

Turn to the MM Trial 2 page and say, Here's another sentence that means more than one thing-The fish was ready to eat. Be careful to say the sentence so that your stress or intonation pattern does not cue the student as to one meaning or the other. Say, What two things can the sentence mean?

If the student produces both essential meanings, say, That's right, the words ready to eat (point to them) mean two things, so the sentence, "The fish was ready to eat," can mean that the fish was cooked and ready to be eaten by someone, or the fish was hungry and ready to eat some fish food.

If the student produces only one or none of the essential meanings, say, Ready to eat can mean ready to be eaten by someone or ready to eat food. So, the sentence, "The fish was ready to eat," can mean the fish was cooked and ready to be eaten by someone, or the fish was hungry and ready to eat some fish food.

## Test Items

Introduce the test items by saying, Now let's do some more. (Pause) Listen carefully while I read each sentence. Then tell me two things each sentence could mean. Turn to the appropriate start point in the Stimulus Book. Read each item without stressing any word or words more than others or using intonation patterns that could cue the student as to which part of the sentence is ambiguous. Then say, What two things can the sentence mean?

## Test Item Prompts

If the student produces only one meaning, say, Now tell me another thing the sentence could mean. If the student's response is vague or is just a paraphrase of the item stimulus, say, What do you mean by that? Or say, Tell me more about that. If the student does not respond at all within 15 seconds, repeat the stimulus and say, Remember, tell me two things the sentence could mean. If the student gives only one meaning or does not respond after this prompt, proceed to the next item.

## Response Times

Allow 10 seconds for the student to respond to the trial items and 15 seconds for the test items.

## Recording and Scoring Responses

Place a check next to each essential meaning that is given. Responses don't need to match the printed response options exactly; they just need to capture the essential meaning or main idea. Score the item as 2 points if both essential meanings are produced; score the item as 1 if only one essential meaning is produced; score the item as 0 if neither essential meaning is given. Follow the Reversal Rule (go back to Item 1) if either of the first two items administered from the age-based start point for 13-21 year olds are not perfect scores (2 points each).

Table 2.5 provides examples of responses collected during the research phases that can be given credit as one of the essential meanings of each ambiguous sentence. The bulleted responses listed in the table were evaluated during data collection and scored as meaning essentially the same thing as the responses printed on the Record Form. For some items (e.g., Item 1), more than two meanings are possible and those are listed as well. The examples are not exhaustive and other variations may be considered correct, based on your judgment. The table also includes examples of some responses that cannot be given credit.

Table 2.5 Examples of Multiple Meanings Responses and Scores

| Item | Fssential Meaning 1 | Fssential Meaning 2 | Other |
| :---: | :---: | :---: | :---: |
| 1. Did you see that fly? | insect/bug/animal (noun) | something moving/flying through the air (verb) <br> - any example of something that flies (e.g., helicopter/bird/ kite/plane) <br> - that thing fly (used as a verb) <br> - something flying <br> - a flier that flies | Other acceptable meanings: <br> - a fly as in a zipper <br> - a fishing fly <br> - a pop fly <br> - something moving quickly <br> Do not credit, but prompt: <br> - Did you see that fly fly? |
| 2. Katy made a basket during the game. | scored two (or three) points/made <br> a shot while playing the game <br> - made it in the hoop <br> - played basketball <br> - made a bucket <br> - scored a/one point | wove a basket while the game was being played <br> ■ made a basket you could carry <br> - spun/knitted a basket/container <br> - constructed (as a craft) <br> - created <br> - out of wood/ straw/bamboo <br> - for dirty clothes/apples <br> - any example of a basket (e.g., fruit/laundry/ Easter/picnic) | Do not credit, but prompt: <br> ■ making something (too vague) <br> - made an actual basket (doesn't add any information to item stimulus) |
| 3. The teacher told us to make a line. | stand in a line/stand one behind the other/make a row <br> - stand in order/stand in line order | draw a line/make a straight mark <br> ■ use pencil/marker to make a line | Do not credit, but prompt: a line from a poem a line of a script/play fishing line |
| 4. I saw her duck when she came out of the building. | bend down (verb) <br> ■ squat/bend/kneel/ stoop/crouch <br> ■ crawl under <br> - as if somebody threw something at her <br> - she ducked (This indicates knowledge of movement.) <br> ■ move quickly (e.g., duck out of here) | her bird/animal (noun) <br> ■ duck in a cage <br> - pet/stuffed/toy duck <br> - yellow, with an orange beak <br> - that sits in a lake <br> - mammal (This implies knowledge that it's an animal.) <br> - like a chicken (This implies knowledge that it's a feathered animal.) <br> ■ I saw a chick. I saw a fat duck. (Use of a chick and a fat duck implies knowledge of an animal.) |  |
| 5. He wrote several letters. | letters of the alphabet A, B, C, D individual letters/characters | messages/correspondence (to send by mail) <br> - mailing letter <br> - to his grandma/a company/ his daughter (This implies knowledge of correspondence.) |  |


| Item | Essential Meaning 1 | Essential Meaning 2 | Other |
| :---: | :---: | :---: | :---: |
| 6. He loves to tell his cat stories. | tells stories/talks to his cat (The key word is to.) <br> - tells his cat [as a friend] about life/fairy tales/what happened during his day <br> - to his cat <br> - talk to the cat about his stories <br> - reads to a pretend/ stuffed cat <br> - talks/lies/fibs to the cat <br> - the cat loves the stories (This implies knowledge that he [the boy] is talking to his cat.) | tells stories/talks about <br> his cat/other cats (The key word is about.) <br> - tells stories about other cats <br> - tells others/friends (stories) about his cat <br> - about his cat <br> - he loves to tell the children his cat stories <br> - he tells silly stories about his cat <br> - tell actual cat stories <br> - wrote a book about his cat |  |
| 7. Andrea moved one foot to the left. | moved herself 12 inches (unit of length) over <br> - [measured] distance <br> - measurement <br> - as in inches <br> - walks about a foot (implies distance) | moved one of her feet (body part) <br> - foot on your body/leg <br> - her right/left foot <br> - adjusted her stance (This implies use of legs.) | Do not credit, but prompt: <br> - whole body <br> - She moved her body one foot to the left. (This response hints at knowledge but needs a prompt because it could be paraphrasing the stimulus.) |
| 8. The children ran into the room with balloons. | ran into the room while holding balloons (i.e., the children had balloons) <br> - ran with balloons in their hands <br> - ran with balloons <br> - the children had balloons | ran into the room that had balloons in it (i.e., the room had balloons) <br> - the room that was painted with balloons <br> - the room that had balloons on the chairs |  |
| 9. Mr. Roberts is an American history teacher. | a [history] teacher who is an American <br> - Mr. Roberts is [an] American <br> - he's a history teacher from America | teaches American history <br> - a teacher of American history <br> - teaches history about America |  |
| 10. The little girl walked to the chair with food. | walked to the chair while holding food <br> - trying not to spill <br> - while carrying food/plate <br> - taking food to a chair <br> - she had food in her hand <br> - serving someone <br> - get/brought/had the food | walked to the chair that had food on it <br> - the chair had food <br> - there was a chair with food on it so the girl walked over to it <br> - she went to the chair with food already placed there <br> - a card chair has food |  |
| 11. Visiting relatives can be annoying. | going to visit relatives can be annoying <br> - (hassle of) travel <br> - when you go visit them <br> - to drive to them is annoying <br> - driving/flying there <br> - going visiting <br> - going to see family | having relatives [come to] visit you can be annoying <br> - family coming to see you <br> - relatives visiting you <br> - they overstay their welcome |  |


| Item | Fssential Meaning 1 | Fssential Meaning 2 | Other |
| :---: | :---: | :---: | :---: |
| 12. Flowers are sold by interesting people. | people who sell flowers are interesting (interesting as an adjective) <br> - people who sell flowers are a little strange/different/etc. | people sell flowers by getting other people/customers interested in them (interesting as a verb) <br> - People are interested in that, so they buy it (implies knowledge of interesting as a verb) <br> ■ Flowers is really interesting to people (another way to say the people are interested in the flowers) | $3^{\text {rd }}$ Acceptable Meaning: <br> - Sold "next to" interesting people (The sentence structure allows for a second meaning based on the word by.) |
| 13. Mario did not blame the girl as much as her mother. | Mario blamed the girl's mother more than he blamed the girl <br> - Mario did not blame the girl; he blamed her mother. | the girl's mother blamed her more than Mario did <br> - Mario isn't as strict as the mom; the mom is very strict. (implies knowledge of comparison between how much Mario blames the girl vs. how much her mom blames her) |  |
| 14. Jason loves his mom's cookies and so does Mark. | Mark loves Jason's mom's cookies <br> - They both love Jason's mom's cookies <br> - Jason and Mark are brothers and they like their mom's cookies. (This response only counts as the first meaning.) | each boy loves his own mom's cookies <br> - their moms' cookies are good, both moms <br> ■ each likes his mom's (Although his mom's is ambiguous, count it as correct because of the inclusion of each.) <br> ■ Mark and Jason love their moms' cookies | Do not credit: <br> ■ Mark loves the cookies and Jason loves the cookies (This response doesn't address issue of whose mom is being referred to.) |
| 15. All new books and pencils must stay at school. | all new books and new pencils must stay at school <br> ■ all of them are new <br> ■ all new supplies <br> - old books and old pencils can go home <br> - you can't take anything from school if it is new | all new books and all pencils <br> must stay at school <br> - all new books and normal pencils <br> - new books and any kind of pencil <br> - old books can go home, but all pencils must stay <br> - you can take home old books but you can't take home any pencils at all |  |

Note. Responses listed first (in italics) in the Essential Meaning 1 and Essential Meaning 2 columns are the same ones listed on the Record Form.

## Deciding if the Discontinue Rule Has Been Met

Discontinue the test after three consecutive item scores of 0 . If you administered additional items because you were not sure if responses would receive a 0 score, do not include those items when computing the test raw score.

## Computing the Test Raw Score

If the student began with Item 1, compute the test raw score for Multiple Meanings by separately adding each score point $(2,1)$ for each item administered and recording the sum of each score point in the appropriate column of the Subtotals area. A Subtotals area is located at the end of the Score column on pages 11 and 12 of the Record Form.

[^7]If the student began at Item 4 and did not obtain a perfect score (i.e., score of 2 points on Items 4 and 5), and the Reversal Rule was followed (i.e., you went back to Item 1 and tested forward), sum each of the score points as indicated above.

If the student began at Item 4 and obtained perfect scores (i.e., 2 points) on Items 4 and 5 , sum each of the score points as indicated above and add 2 points for each item preceding the student's start point.

Once you have recorded the score point values in the two Subtotals areas, sum those Subtotals values and record the total (i.e., the test raw score) in the Raw Score box provided on page 12 of the Record Form. If you discontinue the test and choose, for diagnostic purposes, to administer items beyond the last item meeting the discontinue rule, do not include those scores while computing the raw score for the test. Record the test raw score on the Record Form.

## Item Analysis

Use the Multiple Meanings item analysis table in the Record Form to determine if the student has difficulty with lexical ambiguities, structural ambiguities, or both. In the item analysis table, circle the number of the items with a score of 1 or 0 .

## Extension Testing

Depending on which type of item the student has difficulty with, use extension testing to determine which item modifications help the student be more successful. Lexical ambiguities are more likely to be understood through vocabulary development. In comparison, structural ambiguities may best be understood through stressing the structural phrases that allow you to interpret the sentence in multiple ways.

## Identifying Target Words in Lexically Ambiguous Items

A student may have difficulty identifying the target words that create multiple meanings in a sentence. Select the lexically ambiguous items that the student missed and follow these steps to determine the point at which the student is successful.

1. Read each item to the student and ask him or her to identify the target word that means more than one thing.
2. If the student has difficulty identifying the target word in an item, reread the sentence and stress the word that has multiple meanings. For example, in Item 5, (He wrote several letters), stress the word letters.
3. If the student still has difficulty identifying the target word in an item even when that word is stressed, read the item and identify the word that has more than one meaning.

## Interpreting Lexical Ambiguities with Contextual Cues

If a student is able to identify the target words that have multiple meanings, he or she may still have difficulty generating multiple meanings for the target words. Use contextual cues to help the student generate possible word meanings and apply them to the sentences. For example,

- Item 1. Did you see that fly?
- Supply the following contextual cues:
- There are many bugs.
- Planes do this.
- Item 5. He wrote several letters.
- Supply the following contextual cues:
- a, b, c, d, e, f, g. What are those called?
-What do you put in an envelope and mail to someone?


## Figurative Language

| Start Point | Reversal Rule | Repetitions | Discontinue Rule <br> Ages 9-12: Item 1 |
| :--- | :--- | :--- | :--- |
| Perfect Total Item score <br> Ages 13-21: Item 6 | Allowed <br> (3 points) on two consecutive from start point; if not, <br> go back to Item 1 and test <br> forward. |  | consecutive Total Item scores <br> of 0 |

## Materials Needed

Record Form
Stimulus Book

## Objective

To evaluate the student's ability to a) interpret figurative expressions (idioms) within a given context and b) match each expression with another figurative expression of similar meaning.

## Relationship to Curriculum and Classroom Activities

The meta-semantic abilities evaluated in this test relate to curriculum objectives for knowledge of language, language acquisition and use, and literacy for students in third grade and above. These objectives require that students be able to identify and interpret non-literal language, as in idioms, metaphors, and similes. This requires mental manipulation of semantic units (words, phrases, sentences) with minimal contextual support. Performance on and intervention with similar meta-semantic tasks has been found to correlate with reading comprehension and vocabulary (semantic) knowledge (Zipke, 2007; Zipke, 2008).

## Implications for Intervention

If the student receives a below average score, you can analyze his or her errors according to the categories in the item and error analysis tables. The student's item and error response patterns provide evidence of meta-semantic skills that are inadequate for understanding non-literal language. Metaphor comprehension can be fostered by direct, explicit teaching of strategies (Abrahamsen \& Smith, 2000; Ezell \& Goldstein, 1992), such as differentiating negative (e.g., bad) versus positive (e.g., good) interpretations based on the embedded words for orientation/direction (e.g., down = bad versus up = good; Lakoff \& Johnson, 1980). In addition, intervention approaches that use scaffolding procedures in which supportive contextual cues are provided initially and then withdrawn when appropriate have been shown to be effective (Gibbs, 1987; Nippold \& Martin, 1989; Qualls \& Harris, 1999), as well as mental imagery procedures that help to strengthen meta-semantic awareness for idioms (Nippold \& Duthie, 2003). For students diagnosed with a language disorder and autism spectrum disorder, interactive group activities that focus on idiom comprehension, such as discussion of idioms presented in context and mental imagery procedures, have proven effective in idiom comprehension and retention (Abrahamsen \& Smith, 2000; Ezell \& Goldstein, 1992).

## Administration Directions

Each Figurative Language item consists of two parts: open-ended and multiple choice. The open-ended part of the item requires the student to explain or interpret an idiom (expression), and the multiple-choice part requires the student to select another expression that means the same thing (or almost the same thing) as the first expression.

Note. Open-ended responses do not have to exactly match the wording of the interpretation options listed on the Record Form; however, they do need to contain the essential meaning, or main idea, of the listed interpretation options.

## Demo

Turn to the FL Demo page and say, Sometimes we say something that seems to mean one thing, but really means something else. This is called an expression. For example, a boy who was talking to his little brother who wants to play a game with him might say, "Get lost!" (Point to the expression.) If we heard this expression, we would know that the big brother didn't really want his little brother to actually get lost; he just wanted him to go away and stop bothering him.

## I'm going to tell you what other people said and the expressions they used in different situations, and I want you to tell me what you think they really meant.

## Trial

Turn to the FL Trial page and say, The first situation is a girl talking to her friend about a flat tire. (Pause.) The girl said, "I have to change the tire, so would you give me a hand?" In your own words, tell me what does give me a hand mean?

Turn to the next page (FL Trial, ctd.) and say, Tell me which of these sentences means almost the same thing or could be used instead of would you give me a hand? Wait until you have heard me read all of them before you choose. You may read your choice, point to it, or say the letter. Read each sentence, pausing between them. You may point to each sentence as you read it.

For the Trial Item only, read the correct response (I sure wish you would pitch in.) aloud if the student chooses incorrectly or does not respond. When the Trial Item is completed, say, Now let's do some more.

## Test Items

Turn to the appropriate age-based start point in the Stimulus Book. Introduce the test items by saying, Here's the situation (read the situation) and Here is what the [speaker] said (read the expression). Then say, What does that mean? Once the student understands the task, you may read both the situation and what the speaker said without the introductory text (i.e., Here's the situation; Here is what the [speaker] said.).

Then say, Let's do another one, and proceed to the next page in the Stimulus Book. Say, Tell me which of these sentences could be used instead of (read the expression). Read the multiple choice options aloud. You may point to each choice as you read it. If necessary, say, Wait until you have heard me read all of the sentences.

You may repeat one or both parts of the item if the student requests it. When both parts of the item are complete, say, Let's do another one, and proceed to the next item.

## Test Item Prompt

On the open-ended part of each item, if a response is vague or you think the student is on the right track, prompt for a more complete response by saying, Tell me more about that.

## Response Times

Allow 10 seconds for the student to respond to the trial item and 15 seconds for the test items.

## Recording and Scoring Responses

For the open-ended part of each item, write the student's response verbatim in the space provided. The essential meaning, or main idea, of each expression is listed on the Record Form. Score 2 if the student's response contains the essential meaning of the expression; score 0 if it does not. Table 2.6 presents other examples of student responses during the research phases and how those responses were scored. Responses do not have to be complete sentences.

For the multiple-choice part of each item, place a check next to the response most like the student's response. Correct responses are in bold in the Record Form. Score 1 for a correct response; score 0 if the student selects an incorrect response or does not respond.

[^8]Table 2.6 Examples of Figurative Language Responses and Scores

|  | Item | 2 points | 0 points |
| :---: | :---: | :---: | :---: |
| Item 1 | Situation: A boy talking to his friend who's in a hurry to go to the movies <br> Expression: You'll have to hold your horses until l'm ready to go. | Wait/be patient/hold on/slow down <br> ■ Calm yourself until I'm ready. (This is similar to saying "chill out.") <br> ■ Chill <br> ■ Give me/wait a minute. <br> - Hang on. <br> - Not rush <br> - You'll have to wait until l'm ready. | - Stop |
| Item 2 | Situation: Two friends talking about the surprise party they've planned for another friend <br> Expression: I'm worried that Mary is going to spill the beans to Andre about the party. | Tell/share/give away a secret/ruin a surprise/confess to something <br> - Accidentally tell him about it <br> - Blurt it out <br> - Leak the details <br> - Mary is going to tell her about the party. (Do not penalize for pronoun confusion.) <br> - Reveal something/a secret/surprise <br> - Spoil it <br> - Talk (This indicates that the student knows "spill" means "say something.") <br> - Tell Andre about it <br> - Tell him/her/them (Do not penalize for pronoun confusion.) | ■ Be surprised/excited <br> - Drop some beans <br> - Knock a can over <br> - Mess up (This is too general; prompt responses like this.)* <br> - Play a game like spill the beans <br> - Spill out a secret (To ensure the student's understanding, prompt responses like this where the student uses part of the stimulus.)* |
| Item 3 | Situation: A mom worried that her teenagers will be late for school <br> Expression: You guys need to step on it! | Hurry up/go faster/speed up/do something quickly/put the pedal to the metal <br> - Drive faster <br> - Get going <br> - Get moving/get a move on <br> ■ Hurry it up <br> - Move along <br> ■ Rush | - Get ready <br> - Go (The response is missing the "faster/hurry" element.) <br> - Go already <br> - Go away <br> - Step up on the car to get in |
| Item 4 | Situation: A boy talking to his friend about a stray dog he brought home <br> Expression: I didn't ask my parents first, so l'm in hot water now. | In trouble (do not credit "his parents are mad at him") <br> - Going to be in big trouble <br> - In big trouble <br> - You're in a bad situation. | - He's mad. <br> - I'm in the middle of an investigation. <br> - Now they're [his parents] mad at me. <br> - The dog/boy has to take a bath. |

[^9]|  | Item | 2 points | 0 points |
| :---: | :---: | :---: | :---: |
| Item 5 | Situation: A girl talking about a cousin whom she hasn't seen in a long time <br> Expression: It's easy to lose touch with people in your family. | Not see or talk to/contact/ communicate with (do not credit "forget about them") <br> - Cannot/did not communicate for a while <br> - Drop contact with <br> - Easy not to talk to people in your family <br> - Easy to lose contact <br> - Easy to not connect with your family <br> - Easy to not talk a lot <br> - Easy to not talk to them for awhile <br> - Give up communication (This is awkward, but the meaning is there.) <br> - It's easy not to talk to family and lose touch and not talk to them for a long time, <br> - Lose connection/contact/ communication <br> - Not talk to in a while <br> - Not talk to them/not talk to them in a long time <br> - Not to keep in touch <br> - Easy to forget to call or check up on <br> - Stop talking to them | Be in separate ways (This response should be prompted, because you can't be sure what's meant here.)* <br> ■ Don't get too much <br> - Drift apart/grow apart (Prompt this response.)* <br> - Forget about them/can't remember them <br> - Keeping in contact (This is the opposite of what it means.) <br> - Like I touched you. (This is the literal meaning.) <br> ■ Like lose their phone (Prompt this response.)* <br> - Lose track of time <br> ■ Not be as close to (Ultimately, yes, but this is not the meaning.) <br> - They've been dying lately/when a family member dies <br> - We couldn't touch people in the family. <br> - You miss them. <br> - Your family moves to another state/ somewhere else. |
| Item 6 | Situation: Two girls talking about a friend who was crying in P.E. class <br> Expression: That really came out of the blue. | Out of nowhere/unexpected/sudden/ random <br> - All of a sudden (Sudden implies "unexpected.") <br> - It happened randomly or spontaneously. <br> - Just came out of nowhere (This is a similar idiom.) <br> - Just mysteriously happened (This implies unexpected.) <br> - Just random and crying for no reason <br> - Just started happening/just popped out (This implies "sudden.") <br> - Just suddenly happened ("Suddenly" implies "unexpected.") <br> - Surprising/shocking (This implies unexpected.) <br> - Weren't expecting it | - Blue means sad so she probably got hurt in class. <br> - Came out of her mouth <br> - Girl was crying real hard <br> - Not sure of what happened <br> - She got hurt. <br> - She started to cry. <br> - The girl is turning blue because she is very sad. <br> - They don't know why she's crying. <br> - They were being mean and just thought of it. |

[^10]|  | Item | 2 points | 0 points |
| :---: | :---: | :---: | :---: |
| Item 7 | Situation: Two boys talking about a friend of theirs <br> Expression: Boy, he must have gotten up on the wrong side of the bed! | He's grumpy/cranky/in a bad mood/grouchy <br> - Crabby <br> - Didn't wake up in the right mood <br> - Has a bad attitude ("Attitude" and "mood" are treated as synonyms.) <br> - He is not in a good mood today. <br> - Moody <br> - Their friend is having a bad day, kind of crabby. ("Kind of crabby" gets credit; however, you can have a bad day without being in a bad mood.) | - He doesn't feel well. <br> - He fell off the bed. He is having a hard day. ("Hard" is too vague.) <br> - He is in the wrong place. <br> - He isn't himself. (This doesn't necessarily mean he's grumpy.) <br> - He must have had a bad morning. (This doesn't address his mood.) <br> - He must have started his day off wrong. (This doesn't address his mood.) <br> - He must not be having a good day. (This doesn't address his mood.) <br> - He slept wrong/He slept on the wrong side. (This is a literal meaning.) <br> - He wasn't in the mood. (The response is too vague-in the mood for what?) <br> - He's angry/mad/upset/tense. (These are more intense emotions than being grumpy.) <br> - He's mean. (This is not the same as grouchy or grumpy.) <br> - Off on the wrong foot (This is not the same thing.) <br> - Tired/didn't get much sleep/ overslept |
| Item 8 | Situation: Two students talking about their favorite teacher, who is absent <br> Expression: Mrs. Baker has been under the weather lately. | Sick/not feeling good [well] <br> - Not doing well <br> - Not feeling so healthy <br> - She has been sick. <br> - She hasn't been doing so well. | - Absent/gone <br> - Acting different/weird <br> - Doing the weather/be a weather lady <br> - Late <br> - Moody <br> - Not herself <br> - Right on it <br> - Sad (This is not the most common interpretation, so prompt a response like this.)* <br> - She hasn't been here. <br> - She parked her car under a bridge. <br> - She's mad. <br> - The weather changed. <br> - Under a lot of stress |

[^11]|  | Item | 2 points | 0 point |
| :---: | :---: | :---: | :---: |
| Item 9 | Situation: A boy talking about his older brother playing jokes on people <br> Expression: He'll find out that what goes around comes around. | What you do to someone else (bad or good) comes back to you. (needs to include both elements: what you do + will be done to you or will come back; exception is words that mean all this, like "comeuppance" or "payback")/karma <br> - Comeuppance <br> - He'll be paid back. <br> - He'll get a taste of his own medicine. (similar idiom) <br> - He's going to get what's coming to him/what he deserves. <br> - If he did something bad, something bad will happen to him. <br> - If you do something bad, you might get something bad back. <br> - It will come back at him. <br> - It's going to come back to bite him. (This is a similar idiom.) <br> - Payback <br> - People will play jokes on him too. (Too implies he did something first.) <br> - Playing jokes on people will get people to play jokes on you. <br> - Revenge <br> - The people he jokes will do a joke to him. <br> - What he did could happen to him. <br> - What he does to a person may come back to him. <br> - What you dish out to someone is going to come back to you. <br> - What you do now could happen to you. <br> - What you do to others will be done to you. <br> - You reap what you sow. (This is a similar proverb.) | A rumor/gossip <br> - Come full circle (The response is close in meaning, but not the same. It means "it has ended up where it started.") <br> - He finds out a consequence. (Prompt for more because there are all kinds of consequences.)* <br> - He finds trouble. <br> - He will get a joke played on him. (This doesn't have the first element.) <br> If he does that and nobody knows about it, it will come back to him. <br> If you do something, something bad will happen to you. (This is close, but the first part is vague; it should be prompted.)* <br> - One person tells a person and that person tells another person and it just keeps going. <br> - People will prank him. (This only has one element.) <br> - Pranks are about to backfire. (Backfire is too vague and should be prompted.)* <br> - Runs around <br> - Since he playing a joke on his brother, he may play a joke on him (The response is very confusing with all the pronouns; also, doesn't fit context.) <br> - Somebody is going to make jokes about him. (Making jokes and playing jokes are two different things; this should be prompted.)* <br> - Spreading rumors <br> - Talking about people stabs you in the back. <br> - They are messing around and playing jokes. <br> - What he does to him will come back to his brother. (It is difficult to tell who he and his brother is referring to; this should be prompted.)* <br> - What he does to people will go around. <br> - When someone starts talking about him, he's going to get jokes played on him. <br> - When you say something about someone - it will come back to you. (Playing jokes and saying something aren't the same.) <br> - When you throw something, it can come back. <br> - You'll get a taste of his own lies. (This comes close, but playing jokes doesn't mean lying.) |

[^12]|  | Item | 2 points | 0 points |
| :---: | :---: | :---: | :---: |
| Item 10 | Situation: Three friends talking about updating the school website <br> Expression: We'd better meet so we're on the same page. | Thinking the same way/in agreement/ having the same mindset/of one accord <br> - All in agreement <br> - Get together so can agree on how to update it <br> - Have the same ideas <br> - In accordance <br> - Same ideas <br> - So we know we are planning the same thing (This implies thinking the same way.) <br> - So we're thinking the same things and don't mess up. <br> - They're all thinking the same way together <br> - To be on the same track (This is a similar metaphor.) <br> - We need to make sure we're all in one accord. <br> - Working toward same goal | - All know what each other are thinking. (This doesn't imply agreement.) <br> - All understand each other. ("Understanding" and "agreeing" are not the same thing.) <br> - All where they're supposed to be <br> - Are on the same level (This is missing the "agreement" element.) <br> - Doing the same thing (This is missing the "thinking" element.) <br> - Finish and update the website <br> - Get on the same page, get working <br> - In case they get lost - like in the woods <br> - Know the same things (The response is too vague; it should be prompted.)* <br> - Know what each other is going to do <br> - Know what each other is talking about <br> - Know what the other person is thinking (It is not enough to know what the others are thinking; they have to be thinking the same thing.) <br> - Know what's going on (This is missing the element of "agreement.") <br> - On the same screen on the computer <br> - Same place <br> - So they know what they're talking about <br> - So we know each other and what we're doing. (Knowing what you are doing doesn't mean you agree on how to do it.) <br> - They all understand what needs to be done. (Understanding what needs to be done doesn't mean they all have the same ideas or are thinking in a similar way about getting it done.) <br> - They are on the same website page - not book page. <br> - They need to meet somewhere. <br> - To wait <br> - We don't want to get lost on the different page. <br> - We're on track. (This has more to do with schedule.) |

[^13]|  | Item | 2 points | 0 points |
| :---: | :---: | :---: | :---: |
| Item 11 | Situation: Two sisters talking about a neighbor boy and his dad <br> Expression: Looks like the apple doesn't fall far from the tree! | Like father, like son/children are like their parents (has to do with actions, not looks) <br> - Act very similar. <br> - Both do the same thing(s). <br> - Children can be just like one of their parents. <br> - Chip off the old block (This is a similar idiom.) <br> - Does the same thing <br> - Following in his dad's footsteps (This is a similar idiom.) <br> ■ Just like his father/He's just like his dad. <br> - That boy is a lot like his dad. <br> - The boy not as far different as his dad (The response is confusing, but the meaning comes through.) <br> - They are similar characters. <br> - They are similar/alike/the same. | Close to his dad (Being close doesn't imply being similar.) <br> - He stays close to his dad and doesn't wander. (This is a literal meaning.) <br> - Someone takes after another person and they both act very similar. (Someone is too vague; it needs to indicate a parent-child relationship. This response should be prompted.)* <br> - Still lives at home <br> - The dad is the tree and the son doesn't go far from him. <br> - They are not too far from the sisters. They look the same. <br> - They stay together. |
| Item 12 | Situation: Two friends talking about their grouchy history teacher <br> Expression: I think Mr. Brown's bark is worse than his bite. | He sounds worse than he acts/gets angry but takes no action. (Response needs to include grouchy/mean/ threatening element) <br> - When he screams it's worse than when he gives some homework. <br> - He threatens to do what he says but doesn't follow through. <br> - The way he talks is worse than the assignments he gives. <br> - He may be grouchy - he's all talk and won't do anything. (The second part is what gets credit.) <br> - He might say mean stuff, but he doesn't ever do anything. <br> - He'll yell at you but won't actually hurt you. <br> - He's full of empty threats. (This implies "all talk/no action.") <br> - What he says is scarier than what he does. <br> - Yelling or shouting is worse than he'd actually do. (This is awkward, but it gets the meaning across.) <br> - He talks more than he punishes. (Punishes implies a threat.) <br> - He's better at talking than discipline. (Discipline implies a threat.) <br> - What he says isn't what he'll do; he's scarier than he actually is, like a pit bull. (The first part has most of the meaning; the second part adds "scary.") <br> - Verbal aggression is worse than his physical aggression. | ■ Doesn't sound as bad as what he's going to do. (This is actually the opposite of what it means.) <br> - Doesn't walk the talk. (This doesn't include the threatening element.) <br> He looks nice but is really mean. <br> . He talks the talk, but does walk the walk. (The response needs "not" at the end of "does"; prompt.)* <br> He was strict. <br> He won't do what he says. (The response doesn't include the threatening element; it should be prompted.)* <br> - He yells. <br> ■ He's grumpy/mean/grouchy. <br> ■ He'll talk a lot but won't do much (The response doesn't include angry/ threatening/grumpy element. It should be prompted.)* <br> - He's scarier than he really is. (The response is vague; it doesn't include reference to the way he sounds vs. what he does.) <br> ■ His mouth is worse than his teaching. <br> - His words are worse than his attitude. (The response is missing the "action" element.) <br> - Saying he is worse than a dog. <br> - Talk is cheap/all talk and no action (There is no mean/threatening element; it should be prompted.)* <br> - The person is very unhappy or always unhappy. <br> - When he yells it's worse than if he hits you. |

[^14]

[^15]|  | Item | 2 points | 0 points |
| :---: | :---: | :---: | :---: |
| Item 14 | Situation: A teacher after listening to a student explain about his missing homework <br> Expression: Sounds like you're beating around the bush to me. | Stalling/being indirect/not answering a question/not getting to the point/wasting time <br> - Avoiding the subject/issue/problem <br> - Going around the question <br> - Not getting directly to the point <br> - Saying a lot of things, but not the most important thing <br> - Taking a long time to give the answer <br> - Taking the long way to explain | - Ditch your homework <br> - Giving her excuses <br> - Keep forgetting <br> - Lying <br> - Making up stories <br> - Procrastinating (This is not the same as verbal avoidance.) <br> - Slacking <br> - Trying to come up with an excuse <br> - Trying to make excuses <br> - Trying to trick or fool me |
| Item 15 | Situation: Two friends talking about not having any plans this weekend, but having two birthday parties and one anniversary dinner the weekend after that <br> Expression: It seems like it's either feast or famine. | Having either too much or not enough of something/all or nothing/no middle ground <br> (This is a 2-part response and must include concept of overabundance [of something] or nothing, or extremes of an amount) <br> - Really busy or nothing at all <br> - Not the right amount, but extremes <br> - There is nothing to do or too much to do. <br> - A lot at once or nothing at all <br> - Too full [schedule-wise] or nothing to do <br> - Not in the middle - either nothing or too much to do <br> - Whenever it's very busy it's a feast and whenever there's nothing to do it's a famine. <br> - Either relaxing or chaos (Chaos implies overabundance.) | - Eat a lot or don't eat <br> - Either bored or busy <br> - Either busy or you're not (There are no qualifiers.) <br> - Either fun or not fun <br> - Either one way or the other (The response doesn't explain what is "one way or the other"; it should be prompted.)* <br> - Either work or no work <br> - Exciting or not <br> - Extremes (What does extremes mean? It should be prompted.)* <br> - It's either hit or miss (This is close, but not the same meaning.) <br> - Either fast or slow <br> - One or the other (The response doesn't include concept of overabundance or lack thereof; it should be prompted.)* <br> - They either have it or they don't have it (The response is too vague; it should be prompted.)* <br> - You're busy or you're not doing anything (There is no qualifier on busy.) |
| Item 16 | Situation: A guy talking to his friend who's sick of living in an apartment and really wants a house <br> Expression: A house has lots of expenses, so be careful what you wish for. | Sometimes, something that seems good is really not that good. (Two elements needed: seems good/is desirable + is not that good/is bad) <br> - Be careful what you want; it may not come out like you want it. <br> - Everything has its ups and downs. (This is a similar metaphor.) <br> - It could not be what you expected so be careful; it may be more work. <br> - It might not be what you thought it was. <br> - Might actually get what you wish for and it'll be a negative thing sometimes. <br> - There can be something bad about what you wish for. <br> - What you get might not be all it's cracked up to be. (This is a similar metaphor.) | - A house has a lot of expenses so you'd better be sure this is what you actually want. (The first part of the response is verbatim from the stimulus; the second part isn't enough to be creditable.) <br> - A house has more responsibilities <br> - Are you sure you want this? <br> - Be careful what you want. <br> - Be specific before you wish for something. <br> - Consider your choices carefully. <br> - Don't get your hopes up. <br> - Don't go overboard. <br> - Don't rush getting something bigger and better. <br> - Don't wish for anything that might put you in the hole. <br> - He might regret rushing into getting a house (The response hints at the meaning, but isn't enough; it should be prompted.)* |

[^16]|  | Item | 2 points | 0 points |
| :---: | :---: | :---: | :---: |
| Item 16, |  | You don't always get what you want (This implies an undesirable outcome.) <br> - You don't know if something is hard, you think something is better than what it is. <br> - You might think it is the greatest thing in the world, but it may not be. <br> - You might want something but when you get it, it might not be all that you hoped for. | ■ He should rethink his plan. (The response is vague; it is only implied that there may be negative consequences.) <br> Take into consideration all aspects of owning a house. <br> ■ The house could have a lot of problems. <br> - Things aren't perfect; there will be work you have to do. <br> - Think carefully before you make decisions. <br> - Think of the consequences before you do. <br> - What you want can come back to bite you. (The response is close, but vague; it should be prompted.)* <br> - You could want something and you can get it, but later on might realize I shouldn't have got this. (The response is more like a value judgment and is missing the "is bad" element.) <br> - You may not know what you're getting into. (This is close but not the same meaning.) <br> - You might get what you want, but you won't want it when you get it. (This is close, but missing the "undesirable" element.) <br> - You might not want it when you have it. (This is missing the "bad" element.) |
| Item 17 | Situation: Two friends discussing a third friend, who is sick <br> Expression: She thought she had allergies, but it's the flu; that's a horse of a different color. | A very different thing/matter/situation; another matter altogether; something totally separate/different (can't just say "different" without a qualifiersomething like "very," "completely," or "totally") <br> - A lot different <br> - A really different kind of sickness <br> - A whole different situation/problem <br> - Big difference than what she thought <br> - More extreme than she thought <br> - More serious of a condition <br> - The flu is nothing like allergies. <br> - Totally different thing/symptoms <br> - Way different <br> - Way worse than she thought <br> - Whole different level of sickness | - A horse is brown; when you're sick you're green. <br> - A very bad case of getting sick <br> - It's different. (There is no qualifier.) <br> - Not the same <br> - Not what she thought it was <br> - She was allergic to horses and it made her get a flu. <br> - That's something worse. (There is no qualifier like much.) <br> - The flu is different from allergies. (There is no qualifier.) <br> - They're different things. (Just saying different isn't enough. See note.) <br> - Two different things. (There is no qualifier) |

[^17]
## Deciding if the Discontinue Rule Has Been Met

Since each item consists of two parts, open-ended and multiple-choice, you must sum the scores on each part to get a Total Item score. This score is used when trying to determine if the student has reached the discontinue point of three consecutive Total Item scores of 0 . If you administered additional items because you were not sure if responses would receive a 0 score, do not include those items when computing the test raw score. Refer to Figure 2.11 for an example of a correct discontinue on Figurative Language.

## Computing the Test Raw Score

If the student began with Item 1, compute the test raw score for Figurative Language by separately adding each score point $(3,2,1)$ of the Total Item scores of each item administered and recording the sum of each score point in the appropriate column of the Subtotals area. Subtotals areas are located at the end of the Score column on pages 15, 17, and 19 of the Record Form.

If the student began at Item 6 and did not obtain a perfect Total Item score (i.e., 3 points) on Items 6 and 7, and the Reversal Rule was followed (i.e., you went back to Item 1 and tested forward), sum each of the score points as indicated above.

If the student began at Item 6 and obtained perfect Total Item scores (i.e., 3 points) on Items 6 and 7 , sum each of the score points as indicated above and add 3 points for each item preceding the student's start point.

Once you have recorded the score point values in the three Subtotals areas, sum those Subtotals values and record the total (i.e., the test raw score) in the area provided on page 19 of the Record Form. If you discontinue the test and choose, for diagnostic purposes, to administer items beyond the last item meeting the discontinue rule, do not include those scores while computing the raw score for the test. Record the test raw score on the Record Form.

## Item Analysis

The Figurative Language test provides several ways to analyze both the types of items missed by the student and the types of errors made. These analyses can be helpful in determining the student's level in terms of idiom acquisition as well as planning for intervention.

You can analyze the open-ended part of each item by item type. To do so, use the Figurative Language Item Analysis: Open-Ended table. Circle the items scored as 0 to determine if they fall into the Transparent Meaning category, the Opaque Meaning category, or both. Transparent idioms are those idioms that can be inferred given the meanings of the words that make up the expression; opaque idioms are those in which the meanings of the words making up the expression have no resemblance to the figurative meaning. For example, the figurative meaning of the transparent idiom in Item 2 (spill the beans) can be more easily inferred from the word "spill" than can the opaque idiom in Item 1 (hold your horses). In hold your horses, the word meanings that comprise the idiom give no clue as to the figurative meaning (wait/be patient). Because transparent idioms are acquired before opaque idioms (Glucksberg, 2001; Nippold \& Rudzinski, 1993), this will help you determine where the student is in terms of the idiom acquisition continuum.

You can also analyze the open-ended part of the Figurative Language items by error type. To do so, use the Figurative Language Error Analysis: Open-Ended table in the Record Form. Circle all open-ended items that did not receive scores of 2 points to determine if the student's errors fall into one or more of these categories: Literal Meaning, Close in Meaning, and Unrelated Meaning. The Literal Meaning category is reserved for those responses that are literal interpretations of the figurative expression; the Close in Meaning category is reserved for those responses that indicate that the student has some idea of the expression's meaning, but hasn't quite grasped the full meaning. The Unrelated Meaning category is reserved for those responses that are incorrect and have nothing in common with the correct response.

The multiple-choice part of each of the items can also be analyzed by error type. To do so, use the Figurative Language Error Analysis: Multiple Choice table. Circle items scored as 0 to determine if they fall into the Opposite, Literal, or Unrelated Figurative Expression categories. This analysis also helps you determine where the student's errors fall in terms of an idiom acquisition continuum.

[^18]
## Completing the Scoring Summary

Page 1 of the Record Form contains tables where you can summarize all of the CELF-5 Metalinguistics Test and Index scores. The last page of the Record Form contains profiles where you can plot the test scaled scores and the Index standard scores. Use the following steps to complete the score summary with test raw scores, converted norm-referenced scores, and confidence intervals, and for plotting test and Index scores; alternatively, use CELF-5 Metalinguistics scoring on Q-global to quickly and accurately derive all scaled and standard scores for all tests.

## Step 1: Record Test Raw Scores

Depending on the test administered, the raw score for a test is the sum of either the Item scores or the sum of the Total Item scores. Record the raw score for each test administered in the appropriate box of the Test Scaled Scores section on page 1 of the Record Form.

## Step 2: Convert Raw Scores to Scaled Scores Using the Norms Tables in Appendix A

Use the age-appropriate tables in Appendix A to convert each test raw score to a norm-referenced scaled score. Test scaled scores are reported for each 6-month age range from 9:0-12:11; for each 1-year age range from 13:0-16:11; and are collapsed to one range for ages 17:0-21:11.

The test norms tables in Appendix A have two parts. The first part of each table contains the test scaled scores. Raw scores for each test are listed below their respective headings and the associated scaled scores are listed in the outer columns on the left and right sides. The lower section of the table lists the minus/plus (-/+) score points that are used to build confidence intervals (see Figure 2.12).

To use a table, locate the student's raw score in the appropriate test column, then read across to the left or right to the number in the Scaled Score column. This is the scaled score equivalent of the raw score for the test. Enter each test scaled score in the appropriate box in the Test Scaled Scores section on page 1 of the Record Form.

Figure 2.12 Test Scaled Score Norms

| 9:0-9:5 Test Scaled Scores |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Scaled Score | Metalinguistics Profile | Making Inferences | Conversation Skills | Multiple Meanings | Figurative Language | Scaled Score |
| 19 | - | 33-36 | 28-34 | 30 | 45-51 | 19 |
| 18 | - | 32 | 26-27 | 29 | 43-44 | 18 |
| 17 | - | 30-31 | 25 | 28 | 40-42 | 17 |
| 16 | - | 29 | 23-24 | 27 | 38-39 | 16 |
| 15 | 118-120 | 27-28 | 21-22 | 25-26 | 35-37 | 15 |
| 14 | 114-117 | 25-26 | 20 | 23-24 | 33-34 | 14 |
| 13 | 109-113 | 23-24 | 18-19 | 22 | 30-32 | 13 |
| 12 | 104-108 | 21-22 | 16-17 | 20-21 | 27-29 | 12 |
| 11 | 98-103 | 20 | 14-15 | 18-19 | 24-26 | 11 |
| 10 | 92-97 | 18-19 | 12-13 | 16-17 | 21-23 | 10 |
| 9 | 84-91 | 16-17 | 11 | 14-15 | 17-20 | 9 |
| 8 | 76-83 | 14-15 | 9-10 | 12-13 | 14-16 | 8 |
| 7 | 68-75 | 12-13 | 7-8 | 10-11 | 11-13 | 7 |
| 6 | 60-67 | 9-11 | 5-6 | 7-9 | 8-10 | 6 |
| 5 | 52-59 | 7-8 | 3-4 | 5-6 | 5-7 | 5 |
| 4 | 46-51 | 4-6 | 2 | 3-4 | 3-4 | 4 |
| 3 | 41-45 | 2-3 | 1 | 2 | 2 | 3 |
| 2 | 36-40 | 1 | - | 1 | 1 | 2 |
| 1 | 30-35 | 0 | 0 | 0 | 0 | 1 |
| Scaled Score Points for Building Confidence Intervals |  |  |  |  |  |  |
| Confidence Level | Metalinguistics Profile | Making Inferences | Conversation Skills | Multiple Meanings | Figurative Language | Confidence Level |
| 68\% | 1 | 1 | 1 | 1 | 1 | 68\% |
| 90\% | 1 | 2 | 2 | 1 | 2 | 90\% |
| 95\% | 1 | 3 | 3 | 2 | 2 | 95\% |

## Step 3: Determining Test Confidence Intervals

Obtain a confidence interval for each test scaled score by using the lower section of the table. Select the level of confidence (i.e., $68 \%, 90 \%$, or $95 \%$ ) using the increments in scaled score points for each test, and record it in the blank at the top of the Confidence Interval column. Record the number that corresponds to the level of confidence
selected in the Scaled Score Points -/+ column in the Test Scaled Scores section on page 1 of the Record Form. Compute the lower limit of the confidence interval by subtracting the points from the test scaled score, and compute the upper limit of the confidence interval by adding the points to the test scaled score. Record both numbers in the Confidence Interval column in the Test Scaled Scores section on page 1 of the Record Form. See Figure 2.12 for an example of a page from Appendix A, Test Scaled Scores. The example includes the section Scaled Score Points for Building Confidence Intervals, which shows the confidence intervals at $68 \%, 90 \%$, or $95 \%$ levels.

Confidence intervals span the obtainable score range for a given scale only (i.e., the test scaled score range is 1 to 19). For example, a student age 9:3 obtains a Conversation Skills scaled score of 1, and the -/+ points (critical value) for building the confidence interval at $90 \%$ is $-/+2$ score points. That means the confidence interval for the Conversation Skills scaled score of 1 is 1 to 3 , because the lowest obtainable score in the range is 1 . For a more complete discussion of confidence intervals and their interpretation, see Chapter 3.

## Step 4: Determining Percentile Ranks and Percentile Rank Confidence Intervals

A percentile rank expresses a student's score relative to his or her age group in percentile points. It indicates the percentage of individuals tested who have scored equal to or lower than a specific score. For example, a percentile rank of 90 (corresponding to a standard score of 119) means that $90 \%$ of the individuals who took the test had a score of 119 or less. Convert each test scaled score and each composite standard score to a percentile rank by using the table in Appendix D. Locate the test scaled score in the test column and read across to the right to the Percentile Rank column. Record the percentile rank for each score in the Percentile Rank column of the Test Scaled Scores section on page 1 of the Record Form.

Establish a confidence interval around these percentile ranks. Determine the percentile rank confidence interval by recording the percentile ranks associated with the lower and upper limits of a test scaled score confidence interval and record them in the Percentile Rank CI column of the Test Scaled Scores section on page 1. The confidence interval around an age 14 student's Figurative Language scaled score of 12 is 11 to 13 (at the $90 \%$ level of confidence). The percentile rank corresponding to a test scaled score of 12 is 75 , and the percentile ranks corresponding to a scaled score of 11 (lower limit of the confidence interval) and 13 (upper limit of the confidence interval) are 63 and 84 , respectively.

## Step 5: Determining Test-Age Equivalents

An age equivalent provides a gross estimate of a student's performance in relation to students of all ages tested in the normative sample. Test-age equivalents for CELF-5 Metalinguistics tests are reported in Appendix C. Find the test raw score in the specific test column and look to the far left or right column to find the test-age equivalent for that test raw score. Record the test age equivalents in the Age Equivalent column of the Test Scaled Scores section on page 1 of the Record Form.

If you choose to compute an age equivalent for an Index score (e.g., Meta-Pragmatics Index score), sum the test-age equivalents for all the tests that form the desired Index score. Divide the sum by the number of test-age equivalents added. The result is the test-age equivalent for the selected Index score. For example, to compute an age equivalent for the MetaPragmatics Index, sum the test-age equivalents for the Making Inferences and Conversation Skills tests (i.e., the two tests that comprise that composite score). If those test-age equivalents are $9: 1$ and $11: 3$ respectively, the sum is $20: 4$; that sum is then divided by 2 (the number of test-age equivalents added), which results in the Meta-Pragmatic Index score ageequivalent of 10:2. For a more complete discussion of test-age equivalents and their interpretation, see Chapter 3.

## Step 6: Recording Growth Scale Values

If you administer CELF-5 Metalinguistics more than once to a student, you may report the student's progress using Growth Scale Values. Use Table F. 1 in Appendix F to obtain Growth Scale Values for the Making Inferences, Conversation Skills, Multiple Meanings, and Figurative Language tests. Use Table F. 2 to obtain Growth Scale Values for the Metalinguistics Profile. Find the test raw score in the far left or right column in the appropriate table in Appendix F and look to the specific test column to find the Growth Scale Value corresponding to that raw score. Record the Growth Scale Value in the appropriate column of the Test Scaled Score section on page 1 of the Record Form. Growth Scale Values may also be recorded on the reproducible form at the end of this chapter. The reproducible form enables comparison of Growth Scale Values across multiple administrations of CELF-5 Metalinguistics.

Figure 2.13 shows a completed Test Scaled Score section for a student age 14:0.

[^19]
## Step 7: Determining Index Scores

The Index Standard Scores section on page 1 of the Record Form lists the tests required to compute each Index score. Transfer the test scaled scores from the Scaled Score column of the Test Scaled Scores section to the appropriate boxes in the Index Standard Scores section on page 1. Sum the test scaled scores for each composite score listed and write the total in the Sum of Scaled Scores column.

For example, to compute the Total Metalinguistics Index score for a student age 14, sum the Making Inferences, Conversation Skills, Multiple Meanings, and Figurative Language test scaled scores. Record the sum in the column labeled Sum of Scaled Scores. Use the age-appropriate table in Appendix B to convert the sum to the Total Metalinguistics Index score. Record this score in the appropriate box of the Standard Score column in the Index Standard Scores section. Repeat this procedure for each Index score you would like to obtain. When you are deriving Index scores, be careful to use the correct Appendix B column.

Establish confidence intervals for the Index scores in the same manner you established confidence intervals for the test scaled scores. Select the level of confidence (i.e., $68 \%, 90 \%$, or $95 \%$ ) and record it in the blank at the top of the Confidence Interval column. Locate the standard score points corresponding to each level of confidence at the top of the tables in Appendix B. Record the number that corresponds to the level of confidence selected in the Standard Score Points -/+ column in the Sum of Scaled Scores section on page 1 of the Record Form. Subtract and add the points from the Index score. Record both the lower and upper limits of the confidence interval in the Confidence Interval column of the Index Standard Scores section.

Confidence intervals span the obtainable score range for a given scale only. The Total Metalinguistics Index score range is 40 to 160 and the Meta-Pragmatics and Meta-Semantics Index scores ranges are 45 to 155. If a student age 12:7 obtains a Total Metalinguistics Index score of 159, and the $-/+$ points (critical value) for building the confidence interval at $90 \%$ is $-/+5$, the confidence interval for the Total Metalinguistics Index score of 159 is 154 to 160, because the highest obtainable score in the range is 160 .

Determine percentile ranks and percentile rank confidence intervals for the Index scores in the same manner as you determined percentile ranks for the Test scaled scores and record the percentile ranks in the Index Standard Scores section.

## Zero Scores

If a student obtains a total raw score of 0 on a CELF-5 Metalinguistics test, that score does not necessarily indicate that the student entirely lacks the ability measured by the test. It indicates, rather, that the student's ability cannot be determined by the particular set of test items. For example, a student may score 0 on Making Inferences but still be able to make inferences given easier items.

If a student obtains a raw score of 0 on one or two of the tests that form the Total Metalinguistics Index score, you can still derive that score by using the appropriate norms tables. If a student obtains a raw score of 0 on one of the tests that form either Meta-Pragmatics Index or the Meta-Semantics Index, you can still derive those Index scores by using the appropriate norms tables.

For example, if a student age 11:2 scores 0 on the Multiple Meanings test, the Multiple Meanings scaled score will be 1. Add the scaled score of 1 to the scaled scores of the other tests that form the Total Metalinguistics Index score and convert the sum using the appropriate table in Appendix B. However, if three of the tests that form the Total Metalinguistics Index score have total raw scores of 0 , you cannot derive that Index score. If the same student scores 0 on both the Multiple Meanings and Figurative Language tests, do not derive the Meta-Semantics Index score. However, if the student scores 0 only on the Multiple Meanings test, you can still derive the Meta-Semantics Index score.

In order to convert a total test raw score of 0 to the test scaled score, the raw score must be an earned score of 0 . An earned score means that administered items were scored 0 until the discontinue rule was met. A student who cannot be trained to take the test does not automatically get a scaled score of 0 . Even with an earned score of 0 , you

[^20]should use caution when interpreting the scores because that particular test may not be the best measurement of the student's ability.

## Step 8: Determining the Meta-Pragmatics/Meta-Semantics Index Scores Discrepancy Comparison

The Discrepancy Comparison section on page 1 of the Record Form helps you evaluate the Meta-Pragmatics and Meta-Semantics Index score differences. To complete the Discrepancy Comparison section:

1. Transfer the Meta-Pragmatics Index and Meta-Semantics Index standard scores from the previous section (i.e., the Standard Score column) to the appropriate boxes in the Meta-Pragmatics/Meta-Semantics Index Scores Discrepancy Comparison section on page 1 of the Record Form.
2. Subtract the Meta-Semantics Index score from the Meta-Pragmatics Index score. Write the difference in the Difference column, remembering to note whether the value is positive or negative (refer to Figure 2.13).
3. Table E. 1 in Appendix E provides the required differences between Index scores needed for statistical significance at the .05 and .15 levels for each age. Find the appropriate age in Table E. 1 and choose the level of significance you wish to use; circle that level in the Level of Statistical Significance column of the the Meta-Pragmatics/Meta-Semantics Index Scores Discrepancy Comparison section.
4. Using the appropriate age and chosen level of significance found in Table E.1, read across to the Composite Pair column. Write the corresponding number in the Critical Value column of the Meta-Pragmatics/MetaSemantics Index Score Discrepancy Comparison section.
5. If the absolute value of the obtained Difference score is equal to or greater than the value in the Critical Value column, the difference is statistically significant. Circle "Yes" in the Significant Difference column if the difference score is equal to or greater than the critical value. Circle "No" if the difference is less than the corresponding critical value.

As illustrated in Figure 2.13, the difference (absolute value) between the Meta-Pragmatics Index score and the MetaSemantics Index score is 15 and the critical value is 11 at the .05 level of significance. Since the difference (i.e., 15) is greater than the critical value (i.e., 11), the difference between the scores is significant. As another example, if the difference between the Meta-Pragmatics Index score and the Meta-Semantics Index is either -3 or 3, and the critical value at the .15 level of significance is 4 , then the difference is not significant because the absolute value of the difference (i.e., 3) is less than the critical value (i.e., 4).
6. Use Table E. 2 in Appendix E to determine how prevalent the score differences are.

See Chapter 3 of this Examiner's Manual for more information on determining and interpreting differences in Index scores. See Chapter 3 of the Technical Manual for a discussion of the prevalence of score differences in the normative and clinical samples and if the student's differences may impact intervention, educational accommodations, and adaptations.

## Step 9: Plotting Test and Index Scores

Both the test and Index scores can be plotted on the profiles provided on the last page of the Record Form. By opening the Record Form and laying it flat so that the first and last page are visible, you can easily see the scores on page 1 and transfer them to the profiles. To plot the test scores, record the test scaled scores in each box. Place an X on the dot that corresponds to the scaled score in each column on the Scaled Score Profile as shown in Figure 2.14. Place bars at the upper and lower ranges of the scores to reflect the confidence interval around each score. Plot the Index scores on the Index Score Profile in the same manner. Interpretation of CELF-5 Metalinguistics scores is discussed in Chapter 3.

his chapter provides information needed to interpret CELF-5 Metalinguistics test results. CELF-5
Metalinguistics test scores, in conjunction with other test results, can provide comprehensive, accurate, norm-referenced information about a student's metalinguistic skills that enables you to make diagnostic decisions and intervention recommendations.

In addition to the standardized, norm-referenced tests used to establish eligibility for services, descriptive and authentic performance assessments are also needed. They describe classroom and home language performance and allow clinicians to design appropriate classroom strategies and recommendations for the student at home. Descriptive and curriculum-relevant measures enable clinicians to focus on the classroom as a communication and languagelearning environment and to evaluate how a student uses language for a variety of purposes, including literacy, learning, organization, and socialization. With their use, the evaluation process can focus on the student's language performance in natural contexts, with a goal of collecting performance-based authentic data to develop a more complete picture of the student's day-to-day language, learning, and communication patterns.

Description of CELF-5 Metalinguistics Results
CELF-5 Metalinguistics test results will help you determine if a student has a language disorder while comparison of select Index scores will help determine and describe the nature of the student's language disorder. Descriptions of different types of norm-referenced information (i.e., standard scores, confidence intervals, percentile ranks, and test-age equivalents) will help you determine the severity of a student's language disorder. Case studies provide examples of test interpretation, and Growth Scale Values provide a measure of student progress across repeated test administrations.

Description of Norm-Referenced Scores
Use norm-referenced scores to compare a student's performance to the performance of other students the same age in the normative sample. CELF-5 Metalinguistics provides scaled scores for five tests, and standard scores for the composites: the Total Metalinguistics Index, the Meta-Pragmatics Index, and the Meta-Semantics Index.

Test Scaled Scores
Test scaled scores provide performance information about the language content that each test targets. Scaled scores are available for the following tests:

Metalinguistics Profile (MP)
Making Inferences (MI)
Conversation Skills (CS)
Multiple Meanings (MM)
Figurative Language (FL)

Test scaled scores are used to compare the student's performance to the typical performances of the same-age norm group. These scores are derived from the total raw scores for each test and are on a normalized score scale that has a mean of 10 and a standard deviation (SD) of 3 . A scaled score of 10 describes the average of a given age group. Scores of 7 and 13 are 1 SD below and above the mean, respectively. About two-thirds of all students with typical language development earn scaled scores between 7 and 13. Table 3.1 shows the relationship of CELF-5 Metalinguistics scaled scores and percentile ranks to distances from the mean, expressed in SD units. Use the norms tables in Appendix A to convert the raw score for each test to a normalized scaled score.

Table 3.1 Distances From the Mean and Percentile Rank of Test Scaled Scores

| Scaled Score | Distance From Mean | Percentile Rank |
| :---: | :---: | :---: |
| 19 | $+3 S D$ | 99.9 |
| 16 | $+2 S D$ | 98 |
| 13 | $+1 S D$ | 84 |
| 10 | $-1 S D$ | 50 |
| 4 | $-2 S D$ | 16 |
| 1 | $-3 S D$ | 2 |

Scaled scores of 7 and 13, 1 SD below and above the mean, respectively, are traditionally seen as the lower and upper limits of the average range of performance. However, when using an individual test score rather than an Index score to inform diagnostic decisions or determine eligibility for services, a more stringent criterion for performance is recommended. Use the guidelines in Table 3.2 to describe performance on the CELF-5 Metalinguistics tests.

Table 3.2 Guidelines to Describe Performance

| Test Score | Classification | Relationship to Mean |
| :---: | :---: | :---: |
| 13 and above | Above Average | $+1 S D$ and above |
| 8 to 12 | Average | Within + or $-1 S D$ |
| 7 | Borderline/Marginal/At-Risk | At $-1 S D$ |
| 6 and below | Low to Very low | Below $-1 S D$ |

It is recommended that you consider scaled scores of 7 as borderline or marginal when using individual test scores in making diagnostic decisions or determining eligibility for services. As shown in Table 3.1, a scaled score of 7 indicates performance at the 16th percentile-meaning the student performed as well as or better than $16 \%$ of age peers. Conversely, it means that $84 \%$ of age peers earned higher scores. A student who performs at the borderline/marginal/ at-risk level (i.e., receives a test scaled score of 7 ) on the metalinguistic skills measured by CELF-5 Metalinguistics will likely struggle with the academic demands of the classroom as well as the communicative demands of social situations.

## Composite Scores

The Total Metalinguistics Index, Meta-Pragmatics Index, and Meta-Semantics Index scores are composite scores. Composite scores are standard scores based on the sum of various test scaled scores. Because composite scores reflect a student's abilities in a skill area (e.g., meta-pragmatic or meta-semantic language skills) across multiple tasks

[^21]with a wide score range, you can have confidence in the precision of the score. Summing the test scaled scores rather than the test raw scores ensures that the CELF-5 Metalinguistics Total Metalinguistics Index score and MetaPragmatics and Meta-Semantics Index scores represent an equal weighting of each test score. The Index scores are on a normalized standard score scale that has a mean of 100 and a $S D$ of 15 , a scale commonly used in psychological and educational testing. A standard score of 100 on this scale represents the performance of the typical student of a given age. Figure 3.1 shows the relationship between the CELF-5 Metalinguistics Index scores and a normal distribution of scores. Scores of 85 and 115 correspond to 1 SD below and above the mean, respectively. About twothirds of all students with typical language development earn scores in this range. Table 3.3 shows the relationship of standard scores and percentile ranks to distances from the mean, expressed in SD units.

Figure 3.1 The Normal Curve With Standard Scores, Scaled Scores, and Percentile Ranks Indicated


Table 3.3 Distances From the Mean and Percentile Rank of Selected Standard Scores

| Standard Score | Distance From Mean | Percentile Rank |
| :---: | :---: | :---: |
| 145 | +3 SD | 99.9 |
| 130 | +2 SD | 98 |
| 115 | +1 SD | 84 |
| 100 | Mean | 50 |
| 85 | -1 SD | 16 |
| 80 | -1.3 SD | 9 |
| $78^{\text {a }}$ | -1.5 SD | 6.7 |
| 70 | -2 SD | 2 |
| 55 | -3 SD | 0.1 |

[^22]Table 3.4 shows the type of scores available for CELF-5 Metalinguistics tests and Index scores.

Table 3.4 Type of Scores Available for Tests and Index Scores

|  | Scaled <br> Score | Standard <br> Score <br> (Composite) | Test-Age <br> Equivalent | Crowth <br> Scale Value |
| :--- | :---: | :---: | :---: | :---: |
| Test or Index | X |  | X | X |
| Metalinguistics Profile | X | X | X | X |
| Making Inferences | X | X | X | X |
| Conversation Skills | X | X | X |  |
| Multiple Meanings |  | X |  | X |
| Figurative Language | X |  |  |  |
| Total Metalinguistics Index |  |  |  |  |
| Meta-Pragmatics Index |  |  |  |  |
| Meta-Semantics Index |  |  |  |  |

## Total Metalinguistics Index Score

The Total Metalinguistics Index Score is a measure of general metalinguistic ability. It quantifies a student's overall language performance and, when used in conjunction with the Meta-Pragmatics Index and the Meta-Semantics Index scores, can aid in determining the presence or absence of a language disorder. The Total Metalinguistics Index score is derived by summing the scaled scores from four CELF-5 Metalinguistics tests. See Chapter 2 of the Technical Manual for a description of how the Total Metalinguistics Index score was developed.

## Meta-Pragmatics and Meta-Semantics Index Scores

The Meta-Pragmatics and Meta-Semantics Index scores provide information about the nature of a student's language disorder. These Index scores help determine a student's strengths and weaknesses across pragmatic and semantic areas. Each Index score is formed by summing the scaled scores of selected tests that measure similar features of language, and converting the sum to a standard score using the tables in Appendix B . The test scores that compose each Index score have been confirmed by factor analysis, a statistical procedure that identifies and structures relationships between tests. See Chapter 4 of the Technical Manual for a description of how the factor-based Index scores were developed. See Table 3.5 for a list of the tests that compose the Index scores.

## Meta-Pragmatics Index Score

The Meta-Pragmatics Index score is a measure of a student's ability to use content and context to make situationallyappropriate inferences and to initiate appropriate conversations, given constraints set by word choices and interactive contexts. This Index score can aid in determining the presence or absence of a language disorder. The tests used to derive this score include Making Inferences and Conversation Skills.

## Meta-Semantics Index Score

The Meta-Semantics Index score is an overall measure of a student's ability to process and understand both sentences with multiple meanings and abstract, idiomatic expressions. This Index score can aid in determining the presence or absence of a language disorder. The tests used to derive this score include Multiple Meanings and Figurative Language.

Miller and Chapman (1984) suggest that once a language disorder is identified, it needs to be described according to the modalities that are affected by the disorder and the aspects or domains that are affected within these modalities. The Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (APA, 2013) recognizes the differences between primary language disorders and social (pragmatic) communication disorders, although the disorders carry identical diagnostic codes (315.39/F80.89; pp. 42-49). The Meta-Pragmatics Index score and Meta-Semantics Index scores can be part of the information used to meet diagnostic requirements to account for aspects of social

[^23](pragmatic) communication disorders separately from primary language disorders, and where appropriate, report distinctions in diagnostic features. See Chapter 2 of the Technical Manual for more information about the development of the Meta-Pragmatics and Meta-Semantics Index scores.

Table 3.5 CELF-5 Metalinguistics Tests

| Evaluating metalinguistic skills in context |
| :--- |
| Metalinguistics Profile |
| Identifying the problem, determining eligibility, and describing the nature of the disorder |
| Total Metalinguistics Index (TMI) |
| Making Inferences |
| Conversation Skills |
| Multiple Meanings |
| Figurative Language |
| Meta-Pragmatics Index (MPI) |
| Making Inferences |
| Conversation Skills |
| Meta-Semantics Index (MSI) |
| Multiple Meanings |
| Figurative Language |

## Confidence Intervals

There is some degree of error reflected in the score a student earns on any test. If a test was perfectly reliable and without any measurement error, a student would hypothetically always earn the same score if given the test repeatedly. This hypothetical score is referred to as a "true score." Because no test is perfectly reliable, the true score is predicted to be within the range of scores (plus and minus the measurement error) around the obtained score.

One of the strengths of a norm-referenced test is that information about the size of the expected measurement error is quantified and reported. The standard error of measurement (SEM) is the amount of error in standard score units that should be considered when interpreting a student's scores. The smaller the SEM, the more confidence you can have in the accuracy of the test score. The SEM for the CELF-5 Metalinguistics test and Index scores can be used to construct confidence intervals, or ranges, around a student's score. Reporting a confidence interval around a student's score is particularly important in cases where the score will be used to make classification or placement decisions. Using the confidence intervals, rather than a specific single score, enables you to state the degree of confidence that you have in a classification, eligibility, or placement decision based, in part, on CELF-5 Metalinguistics results.

Each test and Index score is subject to a greater or lesser degree of measurement error, depending on the precision of the particular test or Index score for a given age. Because the SEM may be different for each test or Index score at a given age, the confidence interval will also be different at that age. The critical values in scaled score points for $68 \%, 90 \%$, and $95 \%$ levels of confidence for each test are presented in each norms table in Appendix A. The critical values in standard score points for $68 \%, 90 \%$, and $95 \%$ levels of confidence for each Index score are presented in the uppermost section of each norms table in Appendix B. The higher the level of confidence applied to a score, the larger the critical value and the greater the range of scores around the obtained score. Establishing confidence intervals around CELF-5 Metalinguistics scores and using that information ensures greater accuracy when you are interpreting scores. Figure 3.2 illustrates part of a table in Appendix A that shows the critical value for each test in scaled score points. Figure 3.2 also illustrates part of a table in Appendix B, showing the critical value in standard score points listed above each composite score column.

Confidence intervals span only the obtainable score range for a given scale: the test scaled score range is $1-19$, the Total Metalinguistics Index score range is 40-160, and the Meta-Pragmatics Index score and the Meta-Semantics Index score range is $45-155$. If a student age 9:4 obtains a Multiple Meanings scaled score of 1 and the critical value for building the confidence interval at $95 \%$ is $-/+2$, the confidence interval for the Multiple Meanings scaled score of 1 is 1 to 3 because the minimum obtainable score in the range is 1 . Conversely, if a student, age 9:4 obtains a

Total Metalinguistics Index score of 159 and the critical value for building the confidence interval at $95 \%$ is $-/+7$, the confidence interval around 159 is 152 to 160 , because the maximum obtainable score in the range is 160 .

Figure 3.2 Appendixes A and B Norms Tables, Illustrating Critical Values in Standard Score Points Used to Build Confidence Intervals

| APPENDIX A 9:0-9:5 Test Scaled Scores |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Scaled Score Points for Building Confidence Intervals |  |  |  |  |  |  |
| Confidence Level | Metalinguistics Profile | Making Inferences | Conversation Skills | Multiple Meanings | Figurative Language | Confidence Level |
| 68\% | 1 | 1 | 1 | 1 | 1 | 68\% |
| 90\% | 1 | 2 | 2 | 1 | 2 | 90\% |
| 95\% | 1 | 3 | 3 | 2 | 2 | 95\% |

APPENDIX B 9:0-9:5 Index Standard Scores (continued)

|  | Total Metalinguistics Index | Meta-Pragmatics Index | Meta-Semantics Index |
| :--- | :---: | :---: | :---: |
| $68 \%$ Confidence Level $=+$ /- | 4 | 6 | 4 |
| $90 \%$ Confidence Level $=+/-$ | 6 | 9 | 6 |
| $95 \%$ Confidence Level $=+/-$ | 7 | 11 | 7 |

Select the level of confidence that is appropriate for the purpose of the assessment. The $95 \%$ level results in the broadest band of scores and provides the highest degree of confidence that the true score is actually in the range specified. The $90 \%$ and $95 \%$ levels are commonly used by decision-making teams to arrive at diagnostic conclusions and determine eligibility for services. You may want to use the $90 \%$ or $95 \%$ level of confidence to make similar decisions about language status and intervention needs. The 68\% level of confidence results in a narrower band of scores but with less confidence that the student's true score lies within the band.

## Percentile Ranks

CELF-5 Metalinguistics provides percentile ranks for all test and Index scores. Percentile ranks should not be confused with the percent of correct answers on a test. Figure 3.1 shows percentile ranks in a normal distribution. Percentile ranks indicate a student's standing relative to others of the same age in the norm group as points on a score scale at or below a given score. CELF-5 Metalinguistics percentile ranks range from $\leq 0.1$ to $\geq 99.9$, with 50 as the median score point. A student who achieves a percentile rank of 25 performs as high as or higher than $25 \%$ of other students of the same age. The percentile rank of 25 also indicates that $75 \%$ of the students in the normative sample earned higher scores.

Percentile ranks are easy to understand and useful for explaining a student's performance on CELF-5 Metalinguistics relative to the performances of other students. Percentile ranks do not have equal intervals like standard scores or scaled scores, and they cluster near the median-the 50th percentile. Consequently, for a student who scores within the average range, a change of 1 or 2 total raw score points may produce a large change in his or her percentile rank. Conversely, for a student who scores very low on CELF-5 Metalinguistics, a change of 1 or 2 raw score points is not likely to produce a large change in his or her percentile rank. Table 3.1 shows percentile ranks that correspond to selected scaled scores and their distances from the mean, expressed in SD units. Notice that the mean scaled score of 10 is at the 50th percentile rank for all ages. Table 3.3 shows percentile ranks that correspond to selected standard score points for the CELF-5 Metalinguistic Index scores, and their distances from the mean expressed in SD units. The mean standard score of 100 is at the 50th percentile rank for all ages.

You can also establish a confidence interval around the percentile rank. Determine the percentile rank confidence interval by recording the percentile ranks associated with the lower and upper limits of the student's test scaled score or composite score confidence interval.

For example, consider a student age 14:0 who has a Figurative Language scaled score of 7 . The confidence interval around the score is $6-8$ (at the $90 \%$ level of confidence). The percentile rank that corresponds to a test scaled score

[^24]of 7 is 16 , and the percentile ranks that correspond to scaled scores of 6 (lower limit of the $90 \%$ confidence interval) and 8 (upper limit of the $90 \%$ confidence interval) are 9 and 25 , respectively. Therefore, the percentile rank of a test scaled score of 7 is 16 and the $90 \%$ confidence interval around the percentile rank of 16 is percentile rank 9 to percentile rank 25 (see Figure 3.3).

Figure 3.3 Scoring Summary for Record Form

## CELF5 <br> METALINGUISTICS

ELISABETH H. WIIG ■ WAYNE A. SECORD
Name Student
Address 123 Main St.
Age 14 sex: . $\mathbb{A}$ Grade 8 school Anytown Middle School Teacher Mr. Teach
Examiner Mrs. Speech MA CCC-SLP


Do not round up to next month or year.




[^25]
## Test-Age Equivalents

CELF-5 Metalinguistics provides test-age equivalents for all of the tests. A test-age equivalent for a score identifies the age in years and months for which the given raw score was the median for that age group. For example, a total raw score of 18 on Making Inferences corresponds to a test-age equivalent of 9:1. Test-age equivalents for CELF-5 Metalinguistics tests are provided in Appendix C. Clinicians report they use test-age equivalents to explain students' performance on standardized tests to parents/caregivers and teachers. Clinicians also report that test-age equivalents are often mandated by agencies at the local, state, and federal level for eligibility and funding purposes. Although testage equivalents appear to be useful for describing a student's language skills in comparison to typically-functioning students of various ages, there are limitations to their use and interpretation (Kerr, Guildford, \& Kay-Raining Bird, 2003; Maloney \& Larrivee, 2007; McCauley \& Swisher, 1984; Thorndike \& Thorndike-Christ, 2010; Wiig \& Secord, 1992).

## Limitation 1

Test-age equivalents do not reflect a student's relative rank or standing within a group of age peers, and therefore, they lack the precise information that within-group norms provide about rank within an age range. You can make judgments about a student's standing relative to age peers only by using standard scores or percentile ranks. A student with an apparently meaningful age equivalent may or may not be in the average range compared to other children of the same age. For example, a student age 12:10 obtained a test-age equivalent of 10:4 on the Making Inferences test. Although the student may appear to be performing poorly on this test ( $2: 6$ below chronological age), the raw score of 20 on Making Inferences is in the average range of functioning (scaled score of 9 ) for students age 12 years 6 months through 12 years 11 months.

## Limitation 2

Small raw score changes may result in large changes in test-age equivalents. Large differences between test-age equivalents and a student's chronological age may be obtained, but interpreting the student's language skills as being far below or above average for his or her age may be unwarranted because the range of average scores overlaps at adjacent age groups. For example, Students $A$ and $B$ are both age 9:4 and were administered the Multiple Meanings test. Student A earned a total raw score of 16 points and an age equivalent of $9: 1$. Student $B$ earned a total raw score of 18 points and an age equivalent of $9: 10$. This does not mean that student B's skill is 9 months more advanced than Student A's. In fact, Student A's and student B's scaled scores of 10 and 11, respectively, are both in the average range when compared with their age peers, especially when measurement error and applied confidence intervals are also taken into consideration.

## Limitation 3

Test-age equivalents may not be comparable across tests. A student's corresponding percentile ranks for two tests with the same test-age equivalents may differ substantially. For example, a student age 11:2 obtained an age equivalent of 10:4 on both Making Inferences and Figurative Language; however, his or her respective percentile ranks for these tests were 50 and 37 .

## Limitation 4

An extreme test-age equivalent (much lower or much higher than chronological age) does not signify that the student's language functioning resembles that of the extreme age group in every way. In addition, test-age equivalents at the most extreme ends of the age range are particularly difficult to interpret because they may only be reported as being less than 9:0 or greater than 21:0.

Because of these limitations, use of test-age equivalents as the primary scores for diagnosis is not recommended. Standard scores (test or composite) or percentile ranks must be used to compare a student's performance to others of the same age. Clinical decisions should be made from a review of the student's standard scores and other background and qualitative information, such as language samples, parent/teacher interviews, and observations of the student in different language contexts. Diagnosis or placement decisions should never be based on test-age equivalents only or on any one type of score.

[^26]
## Growth Scale Values

Growth Scale Values provide an objective score for measuring changes in CELF-5 Metalinguistics performance over time. They were developed using the performance of students in the normative sample and can be used to quantify small improvements in the language skills of students assessed by CELF-5 Metalinguistics. Growth Scale Values can be used to:

- Track a student's skill development on specific tests (e.g., Multiple Meanings, Making Inferences)
- Determine if the student has gained additional language skills since a previous administration of CELF-5 Metalinguistics
- Measure the efficacy of an intervention protocol that has been implemented for the student

The Growth Scale Value is an equal-interval scale and is superior to raw scores for making comparisons for clinical evaluation. For complete information about CELF-5 Metalinguistics Growth Scale Values see the Measuring Progress-Growth Scale Values section in this chapter.

## Interpretation of CELF-5 Metalinguistics

Use the following interpretation guidelines to derive the most useful and meaningful educational information and therapy programming recommendations from a student's CELF-5 Metalinguistics results.

## Evaluating Language and Communication in Context

In most assessment situations, it is important to get a broader picture of a student's communication and language performance in different situations prior to administering a standardized assessment such as CELF-5 Metalinguistics. If a classroom teacher refers a student for assessment, you may want to talk with the teacher about his or her concerns about the student, such as the student's academic strengths and weaknesses, classroom performance, and communication behaviors with peers. If possible, observe the student interacting with the teacher and participating in social situations with peers (e.g., lunchroom behavior, passing in the halls between classes, waiting for the school bus). You may also want to meet directly with the student's parents/caregivers or ask them about the student's communication behaviors. Communication with the parent/caregiver and teacher, as well as observing the student's spontaneous communication behaviors, will give you a general idea of the student's language competence and how that may impact school performance.

This information may help you plan assessment and intervention that enables you and other professionals to work with the student in the least restrictive environment. If many areas of difficulty are identified or little success is obtained using classroom interventions, the educational team may decide that a diagnostic evaluation of the student is warranted.

## Determining if There is Evidence of a Language Disorder

Clinicians routinely are asked if an individual's language difficulties indicate that he or she has a language disorder. Parents/caregivers may ask the question of a private practitioner about their child who is having difficulty communicating with family and friends, or teachers may ask the question of a school clinician about a student who is not responding to in-classroom learning strategies. CELF-5 Metalinguistics provides norm-referenced information to use as part of a total assessment process to help answer the question.

While any Index score can be used to assist you in making a decision about eligibility for services, examining the Total Metalinguistics Index score in combination with the Meta-Pragmatics and Meta-Semantics Index scores is recommended as best clinical practice yielding the most accurate diagnostic information. The tests that make up the three Index scores best discriminate language performance typical of average or above average language users from language performance observed in children and adolescents with language disorders. Using any one of the Index scores, sensitivity is .96 at $-1 S D$ and .74 at $-1.5 S D$. Specificity is .78 at $-1 S D$ and .93 at $-1.5 S D$. Examine these scores first when interpreting test results to identify a language disorder and to determine if a student is eligible for special services.

Report the Total Metalinguistics Index score and Meta-Pragmatics Index and Meta-Semantics Index scores with their confidence intervals, and corresponding percentile ranks. See Chapter 4 of the Technical Manual for a description of the sensitivity and specificity of the Total Metalinguistics Index score used in conjunction with the Meta-Pragmatics and Meta-Semantics Index scores at $-1,-1.5$, and -2 SD.

You can also choose to use the Total Metalinguistics Index score independently to identify a language disorder at $-1 S D$. At $-1 S D$, sensitivity is .91 and specificity is .89 . It is not recommended that you use the Total Metalinguistics Index score independently of the Meta-Pragmatics Index or Meta-Semantics Index scores at -1.5 SD and -2 SD.

If all three Index scores (the Total Metalinguistics Index score, Meta-Pragmatics Index score, and Meta-Semantics Index score) are 86 or above (less than 1 SD below the mean of the comparison group), further testing is not necessary unless there is other evidence of a language disorder (such as other test results, language sample analysis, teacher observations, parents'/caregivers' reports, your clinical judgment). If any one of these scores - the Total Metalinguistics Index score, Meta-Pragmatics Index score, or Meta-Semantics Index score-is 85 or below (1 or more SD below the mean), or if there is other evidence of a language disorder, additional testing is warranted to further identify specific weaknesses.

The severity of a language disorder is determined by the deviation of a student's scores from the mean of 100 . Table 3.6 presents descriptions of the severity of language disorders based on CELF-5 Metalinguistics results.

Table 3.6 Guidelines for Describing the Severity of a Language Disorder

| Total Metalinguistics Index, <br> Meta-Pragmatics Index, or <br> Meta-Semantics Index | Classification | Above average |
| :---: | :---: | :---: |
| 115 and above | Average | +1 SD and above |
| 86 to 114 | Borderline/Marginal/At-Risk | Within + or -1 SD |
| 78 to 85 | Low range/Moderate | Within -1 to $-1.5 S D$ |
| 71 to 77 | Very low range/Severe | Within -1.5 to -2 SD |
| 70 and below |  | -2 SD and below |

Scores within 1 SD of the mean (between 86 and 114) are considered average. Scores at or below -1 SD indicate that the student is demonstrating borderline to very low language abilities relative to age peers, which may or may not significantly impact academic achievement and participation in classroom activities.

The criteria for identifying a student as having a language disorder vary among school districts and treatment programs. Some agencies use 1 SD below the mean as the criterion to qualify a student for enrollment in an intervention program; others use 1.5 or $2 S D$ below the mean. You will need to plan how to address the student's needs within the framework established by your program.

For interpreting CELF-5 Metalinguistic Index scores in the average to above average ranges (at or above 86) and the low/moderate to very low/severe ranges (at or below 77), the general guidelines are straightforward. However, when Index scores fall in the borderline/marginal/at-risk range (between 78 and 85), the clinical decisions are less clear-cut. For example, a student age 10:5 who is in the fifth grade receives a Total Metalinguistics Index score of 82. Using the $90 \%$ level of confidence (Appendix B), the confidence interval around the student's obtained score of 82 is 75 to $89( \pm 7)$. In this case, the student's score falls within one of several ranges of severity: the low/moderate range, the borderline/marginal/at-risk range, or the average range. When this occurs, you will need to gather more evidence to support an educational placement decision (e.g., additional classroom support, RTI, eligibility requirements for special services). You should also identify whether there are specific areas of weakness, indicated either by other Index scores, individual test scaled scores, or by the Metalinguistics Profile scaled score. If the evidence does not support a diagnosis of language disorder, the student may need support to address specific areas of weakness in the classroom. You and the student's teacher can collaboratively identify strategies to assist the student in acquiring grade-level skills. It would also be appropriate to evaluate the student's level of reading comprehension for grade-level appropriate texts due to the established relationship between metalinguistic abilities and literacy (see Chapter 1 of the Technical Manual).

[^27]
## Appendix A

## Test Scaled Scores

- $\stackrel{\text { APPENDIX A 12:0-12:5 Test Scaled Scores }}{ }$

| Scaled Score | Metalinguistics Profile | Making Inferences | Conversation Skills | Multiple Meanings | Figurative Language | Scaled Score |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 19 | - | - | 32-34 | - | 51 | 19 |
| 18 | - | 36 | 31 | - | 50 | 18 |
| 17 | - | 35 | 30 | - | 49 | 17 |
| 16 | - | 33-34 | 28-29 | 30 | 47-48 | 16 |
| 15 | 120 | 32 | 27 | 29 | 45-46 | 15 |
| 14 | 119 | 30-31 | 25-26 | 27-28 | 43-44 | 14 |
| 13 | 116-118 | 28-29 | 24 | 26 | 40-42 | 13 |
| 12 | 112-115 | 26-27 | 22-23 | 24-25 | 38-39 | 12 |
| 11 | 108-111 | 24-25 | 20-21 | 23 | 36-37 | 11 |
| 10 | 103-107 | 22-23 | 18-19 | 21-22 | 33-35 | 10 |
| 9 | 97-102 | 19-21 | 15-17 | 19-20 | 30-32 | 9 |
| 8 | 90-96 | 17-18 | 13-14 | 17-18 | 26-29 | 8 |
| 7 | 81-89 | 15-16 | 11-12 | 14-16 | 23-25 | 7 |
| 6 | 71-80 | 13-14 | 9-10 | 12-13 | 19-22 | 6 |
| 5 | 62-70 | 10-12 | 7-8 | 10-11 | 14-18 | 5 |
| 4 | 55-61 | 8-9 | 5-6 | 8-9 | 11-13 | 4 |
| 3 | 49-54 | 6-7 | 3-4 | 6-7 | 8-10 | 3 |
| 2 | 44-48 | 4-5 | 2 | 4-5 | 5-7 | 2 |
| 1 | 30-43 | 0-3 | 0-1 | 0-3 | 0-4 | 1 |

[^28]162 CELF-5 Metalinguistics appendix A Test Scaled Scores
APPENDIX A 12:6-12:11 Test Scaled Scores

|  | $\stackrel{\sim}{\square} \stackrel{\square}{\sim} \stackrel{n}{\sim}$ | $\pm \stackrel{\sim}{\square} \simeq \sim$ | $\sigma \infty \wedge 6$ | $\checkmark \mathrm{m} \sim$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\underset{\sim}{m} \underset{\sim}{\sim} \underset{\sim}{\sim}$ $\stackrel{\sim}{m} \stackrel{+}{\sim} \stackrel{1}{\sim} \stackrel{1}{\sim} \stackrel{1}{\sim}$ | $\begin{aligned} & \stackrel{n}{1} \underset{\sim}{\top} \underset{\sigma}{\top} \\ & \infty \\ & 0 \end{aligned}$ |  |  | $-\sim \sim$ |
|  | \| | | | $\stackrel{\infty}{\sim} \underset{\sim}{\underset{\sim}{i}} \stackrel{\sim}{\sim} \underset{\sim}{\underset{\sim}{N}} \underset{\sim}{\underset{N}{N}}$ |  | $\begin{array}{lll} 9 & 0 \\ \infty & 0 \\ \infty & 0 \end{array}$ |  |  | $\cdots \sim$ |
|  |  |  |  |  |  |  | $\sim \sim m$ |
|  | $\mid \stackrel{\sim}{m} \underset{m}{n} \underset{m}{\underset{m}{n}}$ |  |  | $\begin{array}{cc} 9 & R \\ \infty & \text { n } \\ \hline \end{array}$ | $\sim$ |  | $-\sim \sim$ |
|  | \| | | | | |  |  |  |  |  | $\cdots-$ |
|  | $\stackrel{\sim}{\square} \stackrel{\square}{\sim} \stackrel{\sim}{\sim}$ | $\pm \xrightarrow[\sim]{\square}=\bigcirc$ | $\bigcirc \infty \wedge 6$ ¢ | $\checkmark \mathrm{m} \sim$ |  |  |  |

APPENDIX A 14:0-14:11 Test Scaled Scores

|  | $\stackrel{\sim}{\square} \stackrel{\square}{\sim} \stackrel{n}{\sim}$ | $\pm \stackrel{\sim}{\square} \simeq \sim$ | の $\infty$, 0 ¢ | $\checkmark \mathrm{m} \sim$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\text { \| \| \| } \begin{gathered} \bar{i} \\ \text { in } \\ \hline \end{gathered}$ |  | $\underset{\sim}{\infty} \times m \underset{\sim}{m} \underset{\sim}{\sim}$ <br>  |  |  |  | - |
|  | \\| \| \| \| \% |  |  | $\begin{array}{lll} \text { n } & 0 \\ \vdots \\ \vdots & 1 \end{array}$ |  |  | $-\sim \sim$ |
|  | $\dot{m} \underset{m}{m} \frac{\tilde{m}}{\frac{1}{m}} \stackrel{\sim}{n}$ | $\stackrel{\infty}{\sim} \underset{\sim}{\underset{\sim}{\omega}} \stackrel{\sim}{\sim} \underset{\sim}{\sim} \underset{\sim}{\sim} \underset{\sim}{N}$ |  |  |  |  | $-\sim \sim$ |
|  | \| | |  |  |  | $\sim$ |  | $-\sim \sim$ |
|  | \| \| \| \| |  |  |  |  |  | $\cdots-$ |
|  | $\stackrel{\sim}{\square} \stackrel{\square}{\sim} \stackrel{\sim}{\sim}$ | $\pm \stackrel{\sim}{\square} \simeq \sim$ | の $\infty \wedge$ ¢ | $\checkmark \mathrm{m} \sim$ |  |  |  |

## Appendix B

## Index Standard Scores

APPENDIX B 12:0-12:5 Index Standard Scores

|  |  | Total Metalinguistics Index | Meta-Pragmatics Index | Meta-Semantics Index |
| :---: | :---: | :---: | :---: | :---: |
| ```68% Confidence Level = +/- 90% Confidence Level = +/- 95% Confidence Level = +/-``` |  | 3 | 5 | 3 |
|  |  | 5 | 9 | 5 |
|  |  | 7 | 10 | 7 |
| Index Score | Percentile Rank | Sum of Test Scaled Scores |  |  |
|  |  | 4 | 2 | 2 |
| 160 | >99.9 | 71-76 | - | - |
| 159 | >99.9 | 70 | - | - |
| 158 | >99.9 | - | - | - |
| 157 | >99.9 | 69 | - | - |
| 156 | >99.9 | - | - | - |
| 155 | >99.9 | 68 | 37-38 | 38 |
| 154 | >99.9 | - | - | - |
| 153 | >99.9 | 67 | - | 37 |
| 152 | >99.9 | - | 36 | - |
| 151 | >99.9 | 66 | - | 36 |
| 150 | >99.9 | - | - | - |
| 149 | 99.9 | 65 | 35 | - |
| 148 | 99.9 | - | - | 35 |
| 147 | 99.9 | 64 | - | - |
| 146 | 99.9 | - | - | - |
| 145 | 99.9 | 63 | 34 | 34 |
| 144 | 99.8 | - | - | - |
| 143 | 99.8 | 62 | - | - |
| 142 | 99.7 | - | 33 | 33 |
| 141 | 99.7 | 61 | - | - |
| 140 | 99.6 | - | - | - |
| 139 | 99.5 | 60 | 32 | - |
| 138 | 99 | - | - | 32 |
| 137 | 99 | 59 | - | - |
| 136 | 99 | - | 31 | - |
| 135 | 99 | - | - | - |
| 134 | 99 | 58 | - | 31 |
| 133 | 99 | - | - | - |
| 132 | 98 | - | 30 | - |
| 131 | 98 | 57 | - | - |
| 130 | 98 | - | - | 30 |
| 129 | 97 | 56 | - | - |
| 128 | 97 | - | 29 | - |
| 127 | 96 | - | - | 29 |
| 126 | 96 | 55 | - | - |
| 125 | 95 | - | - | - |
| 124 | 95 | 54 | 28 | - |
| 123 | 94 | - | - | 28 |
| 122 | 93 | 53 | - | - |
| 121 | 92 | - | 27 | - |
| 120 | 91 | 52 | - | 27 |
| 119 | 90 | - | - | - |
| 118 | 88 | 51 | 26 | - |
| 117 | 87 | - | - | 26 |
| 116 | 86 | 50 | - | - |
| 115 | 84 | - | 25 | - |
| 114 | 82 | 49 | - | 25 |
| 113 | 81 | - | - | - |
| 112 | 79 | 48 | 24 | - |
| 111 | 77 | - | - | 24 |
| 110 | 75 | 47 | - | - |
| 109 | 73 | 46 | 23 | - |
| 108 | 70 | - | - | 23 |
| 107 | 68 | 45 | - | - |
| 106 | 66 | 44 | 22 | - |
| 105 | 63 | - | - | 22 |
| 104 | 61 | 43 | - | - |
| 103 | 58 | 42 | 21 | - |
| 102 | 55 | - | - | 21 |
| 101 | 53 | 41 | - | - |
| 100 | 50 | 40 | 20 | 20 |

APPENDIX B 12:0-12:5 Index Standard Scores (continued)

|  |  | Total Metalinguistics Index | Meta-Pragmatics Index | Meta-Semantics Index |
| :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { 68\% Confidence Level }=+/- \\ & 90 \% \text { Confidence Level }=+/- \\ & 95 \% \text { Confidence Level }=+ \text { +/- } \end{aligned}$ |  | 3 | 5 | 3 |
|  |  | 5 | 9 | 5 |
|  |  | 7 | 10 | 7 |
| Index Score | Percentile Rank | Sum of Test Scaled Scores |  |  |
|  |  | 4 | 2 | 2 |
| 99 | 47 | - | - | - |
| 98 | 45 | 39 | - | - |
| 97 | 42 | - | - | 19 |
| 96 | 39 | 38 | 19 | - |
| 95 | 37 | - | - | - |
| 94 | 34 | 37 | - | 18 |
| 93 | 32 | - | 18 | - |
| 92 | 30 | 36 | - | - |
| 91 | 27 | 35 | - | 17 |
| 90 | 25 | - | 17 | - |
| 89 | 23 | 34 | - | - |
| 88 | 21 | - | - | 16 |
| 87 | 19 | 33 | 16 | - |
| 86 | 18 | 32 | - | - |
| 85 | 16 | 31 | - | 15 |
| 84 | 14 | - | 15 | - |
| 83 | 13 | 30 | - | 14 |
| 82 | 12 | 29 | 14 | - |
| 81 | 10 | 28 | - | 13 |
| 80 | 9 | 27 | 13 | - |
| 79 | 8 | 26 | - | 12 |
| 78 | 7 | 25 | 12 | - |
| 77 | 6 | 24 | - | - |
| 76 | 5 | 23 | 11 | 11 |
| 75 | 5 | 22 | - | - |
| 74 | 4 | - | - | - |
| 73 | 4 | 21 | 10 | 10 |
| 72 | 3 | 20 | - | - |
| 71 | 3 | 19 | - | 9 |
| 70 | 2 | - | 9 | - |
| 69 | 2 | 18 | - | - |
| 68 | 2 | 17 | 8 | 8 |
| 67 | 1 | 16 | - | - |
| 66 | 1 | - | - | - |
| 65 | 1 | 15 | 7 | 7 |
| 64 | 1 | - | - | - |
| 63 | 1 | 14 | - | - |
| 62 | 1 | - | 6 | - |
| 61 | 0.5 | 13 | - | 6 |
| 60 | 0.4 | - | - | - |
| 59 | 0.3 | 12 | - | - |
| 58 | 0.3 | - | 5 | - |
| 57 | 0.2 | 11 | - | 5 |
| 56 | 0.2 | - | - | - |
| 55 | 0.1 | 10 | - | - |
| 54 | 0.1 | - | 4 | - |
| 53 | 0.1 | - | - | 4 |
| 52 | 0.1 | 9 | - | - |
| 51 | 0.1 | - | - | - |
| 50 | <0.1 | 8 | 3 | - |
| 49 | <0.1 | - | - | 3 |
| 48 | <0.1 | - | - | - |
| 47 | <0.1 | 7 | - | - |
| 46 | <0.1 | - | - | - |
| 45 | <0.1 | 6 | 2 | 2 |
| 44 | <0.1 | - | - | - |
| 43 | <0.1 | - | - | - |
| 42 | <0.1 | 5 | - | - |
| 41 | <0.1 | - | - | - |
| 40 | <0.1 | 4 | - | - |

APPENDIX B 12:6-12:11 Index Standard Scores

|  |  | Total Metalinguistics Index | Meta-Pragmatics Index | Meta-Semantics Index |
| :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { 68\% Confidence Level }=+/- \\ & 90 \% \text { Confidence Level }=+/- \\ & 95 \% \text { Confidence Level }=+/- \end{aligned}$ |  | 3 | 5 | 3 |
|  |  | 5 | 9 | 5 |
|  |  | 7 | 10 | 7 |
| Index Score | Percentile Rank | Sum of Test Scaled Scores |  |  |
|  |  | 4 | 2 | 2 |
| 160 | >99.9 | 71-76 | - | - |
| 159 | >99.9 | 70 | - | - |
| 158 | >99.9 | - | - | - |
| 157 | >99.9 | 69 | - | - |
| 156 | >99.9 | - | - | - |
| 155 | >99.9 | 68 | 37-38 | 38 |
| 154 | >99.9 | - | - | - |
| 153 | >99.9 | 67 | - | 37 |
| 152 | >99.9 | - | 36 | - |
| 151 | >99.9 | 66 | - | 36 |
| 150 | >99.9 | - | - | - |
| 149 | 99.9 | 65 | 35 | - |
| 148 | 99.9 | - | - | 35 |
| 147 | 99.9 | 64 | - | - |
| 146 | 99.9 | - | - | - |
| 145 | 99.9 | 63 | 34 | 34 |
| 144 | 99.8 | - | - | - |
| 143 | 99.8 | 62 | - | - |
| 142 | 99.7 | - | 33 | 33 |
| 141 | 99.7 | 61 | - | - |
| 140 | 99.6 | - | - | - |
| 139 | 99.5 | 60 | 32 | - |
| 138 | 99 | - | - | 32 |
| 137 | 99 | 59 | - | - |
| 136 | 99 | - | 31 | - |
| 135 | 99 | - | - | - |
| 134 | 99 | 58 | - | 31 |
| 133 | 99 | - | - | - |
| 132 | 98 | - | 30 | - |
| 131 | 98 | 57 | - | - |
| 130 | 98 | - | - | 30 |
| 129 | 97 | 56 | - | - |
| 128 | 97 | - | 29 | - |
| 127 | 96 | - | - | 29 |
| 126 | 96 | 55 | - | - |
| 125 | 95 | - | - | - |
| 124 | 95 | 54 | 28 | - |
| 123 | 94 | - | - | 28 |
| 122 | 93 | 53 | - | - |
| 121 | 92 | - | 27 | - |
| 120 | 91 | 52 | - | 27 |
| 119 | 90 | - | - | - |
| 118 | 88 | 51 | 26 | - |
| 117 | 87 | - | - | 26 |
| 116 | 86 | 50 | - | - |
| 115 | 84 | - | 25 | - |
| 114 | 82 | 49 | - | 25 |
| 113 | 81 | - | - | - |
| 112 | 79 | 48 | 24 | - |
| 111 | 77 | - | - | 24 |
| 110 | 75 | 47 | - | - |
| 109 | 73 | 46 | 23 | - |
| 108 | 70 | - | - | 23 |
| 107 | 68 | 45 | - | - |
| 106 | 66 | 44 | 22 | - |
| 105 | 63 | - | - | 22 |
| 104 | 61 | 43 | - | - |
| 103 | 58 | 42 | 21 | - |
| 102 | 55 | - | - | 21 |
| 101 | 53 | 41 | - | - |
| 100 | 50 | 40 | 20 | 20 |

APPENDIX B 12:6-12:11 Index Standard Scores (continued)

|  |  | Total Metalinguistics Index | Meta-Pragmatics Index | Meta-Semantics Index |
| :---: | :---: | :---: | :---: | :---: |
| 68\% Confidence Level = +/- <br> 90\% Confidence Level = +/- <br> 95\% Confidence Level = +/- |  | 3 | 5 | 3 |
|  |  | 5 | 9 | 5 |
|  |  | 7 | 10 | 7 |
| Index Score | Percentile Rank | Sum of Test Scaled Scores |  |  |
|  |  | 4 | 2 | 2 |
| 99 | 47 | - | - | - |
| 98 | 45 | 39 | - | - |
| 97 | 42 | - | - | 19 |
| 96 | 39 | 38 | 19 | - |
| 95 | 37 | - | - | - |
| 94 | 34 | 37 | - | 18 |
| 93 | 32 | - | 18 | - |
| 92 | 30 | 36 | - | - |
| 91 | 27 | 35 | - | 17 |
| 90 | 25 | - | 17 | - |
| 89 | 23 | 34 | - | - |
| 88 | 21 | - | - | 16 |
| 87 | 19 | 33 | 16 | - |
| 86 | 18 | 32 | - | - |
| 85 | 16 | 31 | - | 15 |
| 84 | 14 | - | 15 | - |
| 83 | 13 | 30 | - | 14 |
| 82 | 12 | 29 | 14 | - |
| 81 | 10 | 28 | - | 13 |
| 80 | 9 | 27 | 13 | - |
| 79 | 8 | 26 | - | 12 |
| 78 | 7 | 25 | 12 | - |
| 77 | 6 | 24 | - | - |
| 76 | 5 | 23 | 11 | 11 |
| 75 | 5 | 22 | - | - |
| 74 | 4 | - | - | - |
| 73 | 4 | 21 | 10 | 10 |
| 72 | 3 | 20 | - | - |
| 71 | 3 | 19 | - | 9 |
| 70 | 2 | - | 9 | - |
| 69 | 2 | 18 | - | - |
| 68 | 2 | 17 | 8 | 8 |
| 67 | 1 | 16 | - |  |
| 66 | 1 | - | - | - |
| 65 | 1 | 15 | 7 | 7 |
| 64 | 1 | - | - | - |
| 63 | 1 | 14 | - | - |
| 62 | 1 | - | 6 | - |
| 61 | 0.5 | 13 | - | 6 |
| 60 | 0.4 | - | - | - |
| 59 | 0.3 | 12 | - | - |
| 58 | 0.3 | - | 5 | - |
| 57 | 0.2 | 11 | - | 5 |
| 56 | 0.2 | - | - | - |
| 55 | 0.1 | 10 | - | - |
| 54 | 0.1 | - | 4 | - |
| 53 | 0.1 | - | - | 4 |
| 52 | 0.1 | 9 | - | - |
| 51 | 0.1 | - | - | - |
| 50 | <0.1 | 8 | 3 | - |
| 49 | <0.1 | - | - | 3 |
| 48 | <0.1 | - | - | - |
| 47 | <0.1 | 7 | - | - |
| 46 | <0.1 | - | - | - |
| 45 | <0.1 | 6 | 2 | 2 |
| 44 | <0.1 | - | - | - |
| 43 | <0.1 | - | - | - |
| 42 | <0.1 | 5 | - | - |
| 41 | <0.1 | - | - | - |
| 40 | <0.1 | 4 | - | - |

APPENDIX B 14:0-14:11 Index Standard Scores

|  |  | Total Metalinguistics Index | Meta-Pragmatics Index | Meta-Semantics Index |
| :---: | :---: | :---: | :---: | :---: |
| 68\% Confidence Level = +/- <br> 90\% Confidence Level = +/- <br> 95\% Confidence Level = +/- |  | 3 | 5 | 3 |
|  |  | 5 | 8 | 5 |
|  |  | 6 | 9 | 7 |
| Index Score | Percentile Rank | Sum of Test Scaled Scores |  |  |
|  |  | 4 | 2 | 2 |
| 160 | >99.9 | 71-76 | - | - |
| 159 | >99.9 | 70 | - | - |
| 158 | >99.9 | - | - | - |
| 157 | >99.9 | 69 | - | - |
| 156 | >99.9 | - | - | - |
| 155 | >99.9 | 68 | 37-38 | 38 |
| 154 | >99.9 | - | - | - |
| 153 | >99.9 | 67 | - | 37 |
| 152 | >99.9 | - | 36 | - |
| 151 | >99.9 | 66 | - | 36 |
| 150 | >99.9 | - | - | - |
| 149 | 99.9 | 65 | 35 | - |
| 148 | 99.9 | - | - | 35 |
| 147 | 99.9 | 64 | - | - |
| 146 | 99.9 | - | - | - |
| 145 | 99.9 | 63 | 34 | 34 |
| 144 | 99.8 |  | - | - |
| 143 | 99.8 | 62 | - | - |
| 142 | 99.7 | - | 33 | 33 |
| 141 | 99.7 | 61 | - | - |
| 140 | 99.6 | - | - | - |
| 139 | 99.5 | 60 | 32 | - |
| 138 | 99 | - | - | 32 |
| 137 | 99 | 59 | - | - |
| 136 | 99 | - | 31 | - |
| 135 | 99 | - | - | - |
| 134 | 99 | 58 | - | 31 |
| 133 | 99 | - | - | - |
| 132 | 98 | - | 30 | - |
| 131 | 98 | 57 | - | - |
| 130 | 98 | - | - | 30 |
| 129 | 97 | 56 | - | - |
| 128 | 97 | - | 29 | - |
| 127 | 96 | - | - | 29 |
| 126 | 96 | 55 | - | - |
| 125 | 95 | - | - | - |
| 124 | 95 | 54 | 28 | - |
| 123 | 94 | - | - | 28 |
| 122 | 93 | 53 | - | - |
| 121 | 92 | - | 27 | - |
| 120 | 91 | 52 | - | 27 |
| 119 | 90 | - | - | - |
| 118 | 88 | 51 | 26 | - |
| 117 | 87 | - | - | 26 |
| 116 | 86 | 50 | - | - |
| 115 | 84 | - | 25 | - |
| 114 | 82 | 49 | - | 25 |
| 113 | 81 | - | - | - |
| 112 | 79 | 48 | 24 | - |
| 111 | 77 | - | - | 24 |
| 110 | 75 | 47 | - | - |
| 109 | 73 | 46 | 23 | - |
| 108 | 70 | - | - | 23 |
| 107 | 68 | 45 | - | - |
| 106 | 66 | 44 | 22 | - |
| 105 | 63 | - | - | 22 |
| 104 | 61 | 43 | - | - |
| 103 | 58 | 42 | 21 | - |
| 102 | 55 | - | - | 21 |
| 101 | 53 | 41 | - | - |
| 100 | 50 | 40 | 20 | 20 |

APPENDIX B 14:0-14:11 Index Standard Scores (continued)

|  |  | Total Metalinguistics Index | Meta-Pragmatics Index | Meta-Semantics Index |
| :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { 68\% Confidence Level }=+ \text { +- } \\ & 90 \% \text { Confidence Level }=+/- \\ & 95 \% \text { Confidence Level }=+/- \end{aligned}$ |  | 3 | 5 | 3 |
|  |  | 5 | 8 | 5 |
|  |  | 6 | 9 | 7 |
| Index Score | Percentile Rank | Sum of Test Scaled Scores |  |  |
|  |  | 4 | 2 | 2 |
| 99 | 47 | - | - | - |
| 98 | 45 | 39 | - | - |
| 97 | 42 | - | - | 19 |
| 96 | 39 | 38 | 19 | - |
| 95 | 37 | - | - | - |
| 94 | 34 | 37 | - | 18 |
| 93 | 32 | - | 18 | - |
| 92 | 30 | 36 | - | - |
| 91 | 27 | 35 | - | 17 |
| 90 | 25 | - | 17 | - |
| 89 | 23 | 34 | - | - |
| 88 | 21 | - | - | 16 |
| 87 | 19 | 33 | 16 | - |
| 86 | 18 | 32 | - | - |
| 85 | 16 | 31 | - | 15 |
| 84 | 14 | - | 15 | - |
| 83 | 13 | 30 | - | 14 |
| 82 | 12 | 29 | 14 | - |
| 81 | 10 | 28 | - | 13 |
| 80 | 9 | 27 | 13 | - |
| 79 | 8 | 26 | - | 12 |
| 78 | 7 | 25 | 12 | - |
| 77 | 6 | 24 | - | - |
| 76 | 5 | 23 | 11 | 11 |
| 75 | 5 | 22 | - | - |
| 74 | 4 | - | - | - |
| 73 | 4 | 21 | 10 | 10 |
| 72 | 3 | 20 | - | - |
| 71 | 3 | 19 | - | 9 |
| 70 | 2 | - | 9 | - |
| 69 | 2 | 18 | - | - |
| 68 | 2 | 17 | 8 | 8 |
| 67 | 1 | 16 | - | - |
| 66 | 1 | - | - | - |
| 65 | 1 | 15 | 7 | 7 |
| 64 | 1 | - | - | - |
| 63 | 1 | 14 | - | - |
| 62 | 1 | - | 6 | - |
| 61 | 0.5 | 13 | - | 6 |
| 60 | 0.4 | - | - | - |
| 59 | 0.3 | 12 | - | - |
| 58 | 0.3 | - | 5 | - |
| 57 | 0.2 | 11 | - | 5 |
| 56 | 0.2 | - | - | - |
| 55 | 0.1 | 10 | - | - |
| 54 | 0.1 | - | 4 | - |
| 53 | 0.1 | - | - | 4 |
| 52 | 0.1 | 9 | - | - |
| 51 | 0.1 | - | - | - |
| 50 | <0.1 | 8 | 3 | - |
| 49 | <0.1 | - | - | 3 |
| 48 | <0.1 | - | - | - |
| 47 | <0.1 | 7 | - | - |
| 46 | <0.1 | - | - | - |
| 45 | <0.1 | 6 | 2 | 2 |
| 44 | <0.1 | - | - | - |
| 43 | $<0.1$ | - | - | - |
| 42 | <0.1 | 5 | - | - |
| 41 | <0.1 | - | - | - |
| 40 | <0.1 | 4 | - | - |

## Test-Age Equivalents

| Test Age | Test |  |  |  |  | Test Age |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Metalinguistics Profile | Making Inferences | Conversation Skills | Multiple <br> Meanings | Figurative Language |  |
| <9:0 | 30-93 | 1-17 | 1-11 | 1-15 | 1-20 | <9:0 |
| 9:1 | 94 | 18 | 12 | 16 | 21-22 | 9:1 |
| 9:4 | 95 | - | 13 | 17 | 23 | 9:4 |
| 9:7 | 96 | - | - | - | 24 | 9:7 |
| 9:10 | 97 | 19 | 14 | 18 | 25 | 9:10 |
| 10:1 | 98 | - | - | - | 26 | 10:1 |
| 10:4 | 99 | 20 | 15 | - | 27 | 10:4 |
| 10:7 | 100 | - | - | 19 | 28 | 10:7 |
| 10:10 | 101 | 21 | 16 | - | 29 | 10:10 |
| 11:3 | 102-103 | - | 17 | 20 | 30-31 | 11:3 |
| 11:9 | 104 | 22 | - | 21 | 32-33 | 11:9 |
| 12:3 | 105 | - | 18 | - | 34-35 | 12:3 |
| 12:9 | 106-107 | 23 | 19 | 22 | 36-37 | 12:9 |
| 13:5 | 108-109 | 24 | 20 | 23 | 38-39 | 13:5 |
| 14:5 | 110 | 25 | 21 | - | 40-41 | 14:5 |
| 15:5 | 111 | - | 22 | 24 | 42 | 15:5 |
| 16:5 | 112 | - | - | - | 43 | 16:5 |
| 18:5 | 113 | 26 | 23-24 | 25 | 44-45 | 18:5 |
| 21:0 | - | - | 25 | - | 46 | 21:0 |
| >21:0 | 114-120 | 27-36 | 26-34 | 26-30 | 47-51 | >21:0 |

## Appendix D

## Percentile Ranks, Normal Curve Equivalents, and Stanines

APPENDIX D Percentile Ranks, Normal Curve Equivalents, and Stanines

| Test Scaled Score | Index Standard Scores | Percentile Rank | Normal Curve Equivalent | Stanine | Test Scaled Score | Index Standard Scores | Percentile Rank | Normal Curve Equivalent | Stanine |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 160 | >99.9 | >99 | 9 | 10 | 100 | 50 | 50 | 5 |
|  | 159 | >99.9 | >99 | 9 |  | 99 | 47 | 49 | 5 |
|  | 158 | >99.9 | >99 | 9 |  | 98 | 45 | 47 | 5 |
|  | 157 | >99.9 | >99 | 9 |  | 97 | 42 | 46 | 5 |
|  | 156 | >99.9 | >99 | 9 |  | 96 | 39 | 44 | 4 |
|  | 155 | >99.9 | >99 | 9 | 9 | 95 | 37 | 43 | 4 |
|  | 154 | >99.9 | >99 | 9 |  | 94 | 34 | 42 | 4 |
|  | 153 | >99.9 | >99 | 9 |  | 93 | 32 | 40 | 4 |
|  | 152 | >99.9 | >99 | 9 |  | 92 | 30 | 39 | 4 |
|  | 151 | >99.9 | >99 | 9 |  | 91 | 27 | 37 | 4 |
|  | 150 | >99.9 | >99 | 9 | 8 | 90 | 25 | 36 | 4 |
|  | 149 | 99.9 | >99 | 9 |  | 89 | 23 | 35 | 4 |
|  | 148 | 99.9 | >99 | 9 |  | 88 | 21 | 33 | 3 |
|  | 147 | 99.9 | >99 | 9 |  | 87 | 19 | 32 | 3 |
|  | 146 | 99.9 | >99 | 9 |  | 86 | 18 | 30 | 3 |
| 19 | 145 | 99.9 | >99 | 9 | 7 | 85 | 16 | 29 | 3 |
|  | 144 | 99.8 | >99 | 9 |  | 84 | 14 | 28 | 3 |
|  | 143 | 99.8 | >99 | 9 |  | 83 | 13 | 26 | 3 |
|  | 142 | 99.7 | >99 | 9 |  | 82 | 12 | 25 | 3 |
|  | 141 | 99.7 | >99 | 9 |  | 81 | 10 | 23 | 2 |
| 18 | 140 | 99.6 | >99 | 9 | 6 | 80 | 9 | 22 | 2 |
|  | 139 | 99.5 | >99 | 9 |  | 79 | 8 | 21 | 2 |
|  | 138 | 99 | >99 | 9 |  | 78 | 7 | 19 | 2 |
|  | 137 | 99 | >99 | 9 |  | 77 | 6 | 18 | 2 |
|  | 136 | 99 | >99 | 9 |  | 76 | 5 | 16 | 2 |
| 17 | 135 | 99 | 99 | 9 | 5 | 75 | 5 | 15 | 2 |
|  | 134 | 99 | 98 | 9 |  | 74 | 4 | 13 | 2 |
|  | 133 | 99 | 96 | 9 |  | 73 | 4 | 12 | 1 |
|  | 132 | 98 | 95 | 9 |  | 72 | 3 | 11 | 1 |
|  | 131 | 98 | 94 | 9 |  | 71 | 3 | 9 | 1 |
| 16 | 130 | 98 | 92 | 9 | 4 | 70 | 2 | 8 | 1 |
|  | 129 | 97 | 91 | 9 |  | 69 | 2 | 6 | 1 |
|  | 128 | 97 | 89 | 9 |  | 68 | 2 | 5 | 1 |
|  | 127 | 96 | 88 | 9 |  | 67 | 1 | 4 | 1 |
|  | 126 | 96 | 87 | 8 |  | 66 | 1 | 2 | 1 |
| 15 | 125 | 95 | 85 | 8 | 3 | 65 | 1 | 1 | 1 |
|  | 124 | 95 | 84 | 8 |  | 64 | 1 | $<1$ | 1 |
|  | 123 | 94 | 82 | 8 |  | 63 | 1 | $<1$ | 1 |
|  | 122 | 93 | 81 | 8 |  | 62 | 1 | <1 | 1 |
|  | 121 | 92 | 79 | 8 |  | 61 | 0.5 | $<1$ | 1 |
| 14 | 120 | 91 | 78 | 8 | 2 | 60 | 0.4 | $<1$ | 1 |
|  | 119 | 90 | 77 | 8 |  | 59 | 0.3 | $<1$ | 1 |
|  | 118 | 88 | 75 | 7 |  | 58 | 0.3 | <1 | 1 |
|  | 117 | 87 | 74 | 7 |  | 57 | 0.2 | $<1$ | 1 |
|  | 116 | 86 | 72 | 7 |  | 56 | 0.2 | $<1$ | 1 |
| 13 | 115 | 84 | 71 | 7 | 1 | 55 | 0.1 | $<1$ | 1 |
|  | 114 | 82 | 70 | 7 |  | 54 | 0.1 | $<1$ | 1 |
|  | 113 | 81 | 68 | 7 |  | 53 | 0.1 | <1 | 1 |
|  | 112 | 79 | 67 | 7 |  | 52 | 0.1 | $<1$ | 1 |
|  | 111 | 77 | 65 | 6 |  | 51 | 0.1 | $<1$ | 1 |
| 12 | 110 | 75 | 64 | 6 |  | 50 | <0.1 | $<1$ | 1 |
|  | 109 | 73 | 63 | 6 |  | 49 | <0.1 | <1 | 1 |
|  | 108 | 70 | 61 | 6 |  | 48 | <0.1 | <1 | 1 |
|  | 107 | 68 | 60 | 6 |  | 47 | <0.1 | $<1$ | 1 |
|  | 106 | 66 | 58 | 6 |  | 46 | <0.1 | <1 | 1 |
| 11 | 105 | 63 | 57 | 6 |  | 45 | <0.1 | $<1$ | 1 |
|  | 104 | 61 | 56 | 6 |  | 44 | <0.1 | <1 | 1 |
|  | 103 | 58 | 54 | 5 |  | 43 | <0.1 | $<1$ | 1 |
|  | 102 | 55 | 53 | 5 |  | 42 | <0.1 | $<1$ | 1 |
|  | 101 | 53 | 51 | 5 |  | 41 | <0.1 | <1 | 1 |
|  |  |  |  |  |  | 40 | <0.1 | <1 | 1 |

[^29]
## Appendix E

## Data for Comparing Index Scores

APPENDIX E. 1 Critical Values for Discrepancy Comparisons Between Index Scores

| Age | Level of Significance | Composite Pair |
| :---: | :---: | :---: |
|  |  | MPI-MSI |
| Overall | 0.05 | 14 |
|  | 0.15 | 10 |
| 9:0-9:11 | 0.05 | 13 |
|  | 0.15 | 10 |
| 10:0-10:11 | 0.05 | 14 |
|  | 0.15 | 11 |
| 11:0-11:11 | 0.05 | 15 |
|  | 0.15 | 11 |
| 12:0-12:11 | 0.05 | 12 |
|  | 0.15 | 9 |
| 13:0-13:11 | 0.05 | 15 |
|  | 0.15 | 11 |
| 14:0-14:11 | 0.05 | 11 |
|  | 0.15 | 8 |
| 15:0-15:11 | 0.05 | 15 |
|  | 0.15 | 11 |
| 16:0-16:11 | 0.05 | 14 |
|  | 0.15 | 11 |
| 17:0-21:11 | 0.05 | 13 |
|  | 0.15 | 10 |

APPENDIX E. 2 Prevalence of Index Score Discrepancies in the Normative Sample

| Amount of Discrepancy (points) | MPI-MSI |  | Amount of Discrepancy (points) |
| :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \mathrm{MPI}<\mathrm{MSI} \\ (-) \end{gathered}$ | $\begin{gathered} \mathrm{MPI}>\mathrm{MSI} \\ (+) \end{gathered}$ |  |
| $\geq 40$ | 0.5 | 0.0 | $\geq 40$ |
| 39 | 0.8 | 0.1 | 39 |
| 38 | 0.8 | 0.1 | 38 |
| 37 | 0.9 | 0.1 | 37 |
| 36 | 1.0 | 0.1 | 36 |
| 35 | 1.0 | 0.3 | 35 |
| 34 | 1.0 | 0.4 | 34 |
| 33 | 1.1 | 0.4 | 33 |
| 32 | 1.3 | 0.5 | 32 |
| 31 | 1.4 | 0.6 | 31 |
| 30 | 1.5 | 1.0 | 30 |
| 29 | 1.6 | 1.0 | 29 |
| 28 | 1.6 | 1.4 | 28 |
| 27 | 2.9 | 1.8 | 27 |
| 26 | 3.0 | 2.0 | 26 |
| 25 | 3.3 | 2.0 | 25 |
| 24 | 4.1 | 3.4 | 24 |
| 23 | 4.3 | 3.8 | 23 |
| 22 | 4.5 | 4.3 | 22 |
| 21 | 6.8 | 5.8 | 21 |
| 20 | 7.3 | 6.1 | 20 |
| 19 | 7.5 | 6.9 | 19 |
| 18 | 9.5 | 9.3 | 18 |
| 17 | 10.6 | 9.8 | 17 |
| 16 | 11.0 | 10.3 | 16 |
| 15 | 12.9 | 13.5 | 15 |
| 14 | 14.6 | 14.1 | 14 |
| 13 | 15.5 | 16.6 | 13 |
| 12 | 17.4 | 19.8 | 12 |
| 11 | 19.5 | 21.0 | 11 |
| 10 | 20.9 | 23.8 | 10 |
| 9 | 23.4 | 26.6 | 9 |
| 8 | 27.1 | 27.6 | 8 |
| 7 | 30.1 | 30.6 | 7 |
| 6 | 32.1 | 33.3 | 6 |
| 5 | 36.1 | 36.3 | 5 |
| 4 | 39.4 | 41.1 | 4 |
| 3 | 40.3 | 43.9 | 3 |
| 2 | 44.1 | 46.6 | 2 |
| 1 | 48.6 | 49.8 | 1 |
| Mean | 10.5 | 10.4 | Mean |
| SD | 8.3 | 7.4 | SD |
| Median | 8.0 | 9.0 | Median |

## Growth Scale Values

APPENDIX F. 1 Growth Scale Values Corresponding to Test Raw Scores

| Raw Score | Test |  |  |  | Raw Score |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Making Inferences | Conversation Skills | Multiple Meanings | Figurative Language |  |
| 51 |  |  |  | 619 | 51 |
| 50 |  |  |  | 592 | 50 |
| 49 |  |  |  | 576 | 49 |
| 48 |  |  |  | 567 | 48 |
| 47 |  |  |  | 561 | 47 |
| 46 |  |  |  | 557 | 46 |
| 45 |  |  |  | 552 | 45 |
| 44 |  |  |  | 549 | 44 |
| 43 |  |  |  | 546 | 43 |
| 42 |  |  |  | 542 | 42 |
| 41 |  |  |  | 539 | 41 |
| 40 |  |  |  | 537 | 40 |
| 39 |  |  |  | 534 | 39 |
| 38 |  |  |  | 531 | 38 |
| 37 |  |  |  | 528 | 37 |
| 36 | 607 |  |  | 526 | 36 |
| 35 | 582 |  |  | 523 | 35 |
| 34 | 565 | 606 |  | 520 | 34 |
| 33 | 556 | 582 |  | 517 | 33 |
| 32 | 549 | 567 |  | 515 | 32 |
| 31 | 543 | 558 |  | 512 | 31 |
| 30 | 538 | 551 | 663 | 509 | 30 |
| 29 | 534 | 545 | 633 | 506 | 29 |
| 28 | 530 | 540 | 611 | 504 | 28 |
| 27 | 527 | 535 | 595 | 501 | 27 |
| 26 | 524 | 531 | 582 | 499 | 26 |
| 25 | 521 | 527 | 571 | 497 | 25 |
| 24 | 518 | 524 | 561 | 494 | 24 |
| 23 | 515 | 520 | 552 | 492 | 23 |
| 22 | 513 | 517 | 544 | 490 | 22 |
| 21 | 510 | 513 | 537 | 488 | 21 |
| 20 | 508 | 510 | 530 | 485 | 20 |
| 19 | 505 | 507 | 524 | 483 | 19 |
| 18 | 503 | 504 | 517 | 481 | 18 |
| 17 | 501 | 500 | 511 | 479 | 17 |
| 16 | 498 | 497 | 505 | 477 | 16 |
| 15 | 496 | 494 | 499 | 475 | 15 |
| 14 | 493 | 491 | 493 | 472 | 14 |
| 13 | 490 | 487 | 487 | 470 | 13 |
| 12 | 487 | 484 | 481 | 468 | 12 |
| 11 | 484 | 480 | 475 | 465 | 11 |
| 10 | 480 | 477 | 469 | 463 | 10 |
| 9 | 476 | 473 | 462 | 460 | 9 |
| 8 | 472 | 469 | 456 | 457 | 8 |
| 7 | 467 | 465 | 449 | 454 | 7 |
| 6 | 461 | 460 | 441 | 450 | 6 |
| 5 | 455 | 455 | 433 | 446 | 5 |
| 4 | 447 | 449 | 423 | 441 | 4 |
| 3 | 437 | 441 | 411 | 435 | 3 |
| 2 | 423 | 432 | 393 | 426 | 2 |
| 1 | 403 | 416 | 363 | 409 | 1 |


|  | Test |  | Test |
| :---: | :---: | :---: | :---: |
| Raw Score | Metalinguistics Profile | Raw Score | Metalinguistics Profile |
| 120 | 687 | 74 | 501 |
| 119 | 660 | 73 | 499 |
| 118 | 642 | 72 | 496 |
| 117 | 631 | 71 | 494 |
| 116 | 622 | 70 | 491 |
| 115 | 616 | 69 | 489 |
| 114 | 610 | 68 | 486 |
| 113 | 605 | 67 | 483 |
| 112 | 601 | 66 | 481 |
| 111 | 597 | 65 | 478 |
| 110 | 593 | 64 | 475 |
| 109 | 589 | 63 | 473 |
| 108 | 586 | 62 | 470 |
| 107 | 583 | 61 | 467 |
| 106 | 580 | 60 | 464 |
| 105 | 577 | 59 | 461 |
| 104 | 574 | 58 | 458 |
| 103 | 571 | 57 | 455 |
| 102 | 569 | 56 | 453 |
| 101 | 566 | 55 | 450 |
| 100 | 563 | 54 | 447 |
| 99 | 561 | 53 | 444 |
| 98 | 558 | 52 | 441 |
| 97 | 556 | 51 | 438 |
| 96 | 553 | 50 | 435 |
| 95 | 551 | 49 | 432 |
| 94 | 549 | 48 | 429 |
| 93 | 546 | 47 | 426 |
| 92 | 544 | 46 | 423 |
| 91 | 541 | 45 | 419 |
| 90 | 539 | 44 | 416 |
| 89 | 537 | 43 | 413 |
| 88 | 534 | 42 | 409 |
| 87 | 532 | 41 | 406 |
| 86 | 530 | 40 | 402 |
| 85 | 527 | 39 | 398 |
| 84 | 525 | 38 | 394 |
| 83 | 523 | 37 | 389 |
| 82 | 520 | 36 | 384 |
| 81 | 518 | 35 | 378 |
| 80 | 516 | 34 | 371 |
| 79 | 513 | 33 | 363 |
| 78 | 511 | 32 | 352 |
| 77 | 509 | 31 | 333 |
| 76 | 506 | 30 | 306 |
| 75 | 504 |  |  |


[^0]:    2 CELF-5 Metalinguistics Chapter 1 - Overview of the CELF-5 Metalinguistics Assessment Process

[^1]:    4 CELF-5 Metalinguistics Chapter 1 - Overview of the CELF-5 Metalinguistics Assessment Process

[^2]:    6 CELF-5 Metalinguistics Chapter 2 Administration and Scoring Directions

[^3]:    8 CELF-5 Metalinguistics Chapter $2 \square$ Administration and Scoring Directions

[^4]:    58 CELF-5 Metalinguistics Chapter $2 \square$ Administration and Scoring Directions

[^5]:    64 CELF-5 Metalinguistics Chapter $2 \square$ Administration and Scoring Directions

[^6]:    96 CELF-5 Metalinguistics $\square$ Chapter $2 \square$ Administration and Scoring Directions

[^7]:    100 CELF-5 Metalinguistics Chapter 2 Administration and Scoring Directions

[^8]:    106 CELF-5 Metalinguistics ■ Chapter 2 Administration and Scoring Directions

[^9]:    * Responses that require prompting are marked with an asterisk

[^10]:    * Responses that require prompting are marked with an asterisk.

[^11]:    * Responses that require prompting are marked with an asterisk.

[^12]:    * Responses that require prompting are marked with an asterisk.

[^13]:    * Responses that require prompting are marked with an asterisk

[^14]:    * Responses that require prompting are marked with an asterisk.

[^15]:    * Responses that require prompting are marked with an asterisk

[^16]:    * Responses that require prompting are marked with an asterisk.

[^17]:    Note. Responses listed first (in italics) in the 2-point column are those listed on the Record Form.

    * Responses that require prompting are marked with an asterisk.

[^18]:    116 CELF-5 Metalinguistics Chapter 2 Administration and Scoring Directions

[^19]:    122 CELF-5 Metalinguistics Chapter $2 \square$ Administration and Scoring Directions

[^20]:    124 CELF-5 Metalinguistics Chapter 2 Administration and Scoring Directions

[^21]:    130 CELF-5 Metalinguistics Chapter 3 Test Interpretation

[^22]:    ${ }^{\text {a }} 78$ is rounded from a standard score of 77.5 .

[^23]:    132 CELF-5 Metalinguistics Chapter 3 Test Interpretation

[^24]:    134 CELF-5 Metalinguistics $\quad$ Chapter 3 Test Interpretation

[^25]:    *See Appendix E in the Examiner's Manual

[^26]:    136 CELF-5 Metalinguistics Chapter 3 Test Interpretation

[^27]:    138 CELF-5 Metalinguistics Chapter 3 Test Interpretation

[^28]:    Scaled Score Points for Building Confidence Intervals | $\begin{array}{c}\text { Confidence } \\ \text { Level }\end{array}$ |
    | :---: |
    | $68 \%$ |
    | $90 \%$ |
    | $95 \%$ |

    Multiple Figurative
    Language $-\sim \sim$

    Making Conversation
    
    

[^29]:    CELF-5 Metalinguistics

