HOW TO HELP YOUR KIDS SUCCEED IN SCHOOL

TIPS & ACTIVITIES FOR PARENTS OF PRESCHOOL TO GRADE 5 KIDS

A Publication of K5 Learning

WHAT IS THIS BOOK ABOUT?

This book provides *practical advice* and *specific activities* parents can use to help their kids excel in school.

WHO IS THIS BOOK FOR?

This book is for parents of children in the preschool through elementary school years. Our recommendations are applicable to all kids – from those who have learning difficulties to those who are gifted.

WHY DID WE WRITE THIS BOOK?

We believe, and research shows, that a child's success in school is often defined at a very early age. We wrote this book to encourage and help parents be proactive in getting their kids off on the right foot academically.

WHO IS K5 LEARNING?

K5 Learning is an education company which provides learning resources for kindergarten to grade 5 kids. We've given away over 100 million free worksheets to teachers, tutors and parents. Please visit us at www.k5learning.com.

ACKNOWLEDGMENTS

Some of the material in this book is contributed from publications by the U.S. Department of Education. We would like to thank the Department for making these materials available.

NOTE:

In this booklet, we refer to a child as "him" in some places and "her" in others. We do this to make the booklet easier to read. Please understand, however, that every point that we make is the same for all children.

TABLE OF CONTENTS

Introduction 4

The Basics 5

- Encourage Your Child to Read 5
- Use the Library 6
- Talk with Your Child 6
- Limit TV and Video GameS 7
- Help Your Child Learn to Use the Internet Safely 7
- Make homework a priority 8
- Study outside of School 9
- Choose Study Materials Carefully 10
- Use Online Learning Cautiously 11
- Encourage Your Child to Be Responsible and Work Independently 12
- Elementary School Academics: Think Reading and Numeracy 13

Working with Teachers and Schools 14

- Q: What do I do first? 14
- Q: What if my child has a problem? 14
- Q: When should I talk with my child's teacher? 15
- Q: How do I get the most out of parent-teacher conferences? 15
- Q: What if I don't agree with a school rule or with a teacher's assignments? 16
- Q: What's the best way for me to stay involved in my child's school activities? 16

Helping Your Child with Test-Taking 17

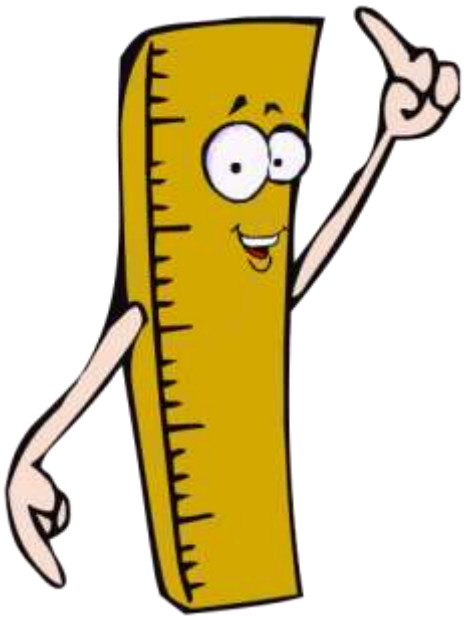
What Your Child Will Be Learning 18
Kindergarten 18
Grade 1 27
Grade 2 38
Grade 3 49
Grade 4 61
Grade 5 73
Activities 85
Can You Top This? (ages 4 – 7) 85
Listen! (Ages 4 – 7) 86
It's a Match (ages 4 - 7) 87
Let's Read (Ages 4 – 7) 88
Author! Author! (Ages 4 – 7) 89
Now You See It, Now You Don't (Ages 4 – 7) 90
How Much Does It Weigh? (Ages 4 – 7) 91
Start to Finish (Ages 4 – 7) 92
Where Did I Put That? (Ages 7 – 9) 93
Making Money (Ages 7 – 9) 94
Reading on the Go (Ages 7 – 9) 95
My Time Line (Ages 7 – 9) 96
Time Flies (Ages 9 – 11) 97
Homework Made Easy (Ages 9 – 11) 98
Divide and Conquer (Ages 9 – 11) 99
Help Wanted (Ages 9 – 11) 100
TOOLS 101

INTRODUCTION

Every child can succeed in school. The question is: *How* can we help our children succeed?

The answer comes from a combination of common sense and research about how children learn and about how to prepare them to learn.

What we say and do in our daily lives can help our children develop positive attitudes toward school and build confidence in themselves as learners. Showing children that the adults in their lives both value education and use it in their daily lives provides them with powerful role models and contributes greatly to their success in school.



It is helpful if parents can build strong ties to their children's schools. When parents and families are involved, the children do better and feel better about going to school. We help children succeed by working with their teachers.

However, schools face ever-increasing burdens, and the amount of personalized attention your child will receive in a class of 30, is limited. Ultimately, it is up to parents to ensure that their children receive the education they need to fulfill their potential.

The purpose of this book is to help you help your child to succeed in school. The book includes:

- information about how you can contribute to your child's school success;
- a guide to what your child will be learning in school;
- activities that you can use to help your child acquire the skills to succeed in school;
- answers to often-asked questions about how to work with teachers and schools;
- tips on how to help your child with taking tests, and;
- some printable and practical tools to use.

THE BASICS

In North America, the school year averages 180 days; in other countries, the school year can last up to 240 days, and students are often in school more hours per day. Clearly, parents need to make education a part of their child's non-school life as well. Here are some things that you can do to help your child make the most of that time:

ENCOURAGE YOUR CHILD TO READ

Helping your child become a reader is the most important thing that you can do to help him succeed in school. Once children learn to read, they spend the rest of their lives reading to learn.

- Start early. If your child is not reading yet, then read aloud to him daily. At first, read for a few minutes at a time, several times a day. As you read, talk with your child. Encourage him to talk about the story. Ask him to predict what will happen next.

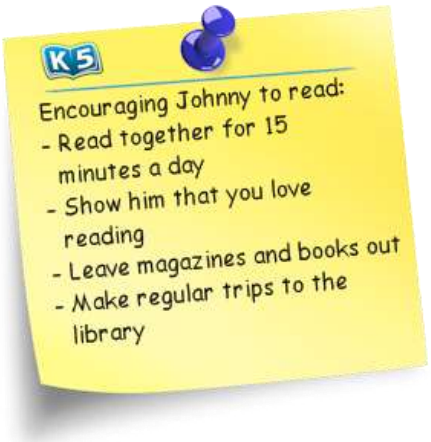
- The joy in reading comes from the content more than the process of reading itself. The sooner your child develops good reading skills, and reading becomes less work, the more he will enjoy what he reads.

- The building blocks of reading include phonemic awareness (recognizing different sounds), phonics (associating sounds with letters) and sight words (recognizing common words instantly). Find quality exercises to help your child develop these skills.

- Make sure that your home has lots of reading materials for your child. Keep children's books in the house.

- Turn off the TV and video games! Books can have a hard time competing for a child's attention.

- Show them that you value reading. Let your child see you reading for pleasure as well as reading letters and recipes, directions and instructions, newspapers, articles online and so forth. When your child sees that reading is important to you, she is likely to decide that it is important to her, too.



- Get help for your child if he has a reading problem. When a child is having reading difficulties, the reason might be simple to understand and deal with. For example, your child might have trouble seeing and needs glasses. Ask his teachers about special services, such as after-school help and for names of community organizations and local volunteer literacy groups.

USE THE LIBRARY

Libraries can be wonderful places of learning and discovery for all people, especially children.

- Start taking your child to the library as early as possible.
- See that your child gets his own library card as soon as possible.
- When you take your child to the library, introduce yourself and your child to the librarian. Ask the librarian to show you around the library and recommend specific books. Finding a series of books that captures your child's imagination can be a big step forward in your child learning to love to read.
- Ask the librarian about special programs that your child might participate in, such as summer reading programs and book clubs.
- Let your child know that she must follow the library's rules:
    - Books must be handled carefully.
    - Materials that are borrowed must be returned on time.
    - Shouting, running and being disruptive are not appropriate library behaviors.

TALK WITH YOUR CHILD

It is through speaking with parents and older family members that children develop the language skills they need. Children who do not hear a lot of talk, and who aren't encouraged to talk themselves, often have problems learning to read.

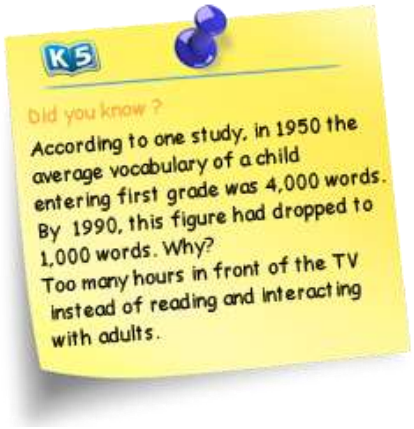
Children who have not learned to listen carefully often have trouble following directions and paying attention in class.

- Wherever you are, find time to talk; for example, as you shop in a store, talk about prices, differences in brands, etc.
- As you read a book with your child, pause occasionally to ask him about what's happening. Ask him what he thinks will happen next, or what he thinks of a particular character.
- When your child talks to you, stop what you're doing and pay attention. Look at him and ask questions to let him know that you've heard what he said. Demonstrate to him how to be a good listener.

LIMIT TV AND VIDEO GAMES

Most American children spend far more time watching TV or playing video games than they do reading or completing homework.

- Limit the time that your child watches TV or plays video games, and create more time for reading, playing with friends and talking with family members.
- Most "educational" TV programs and many "learning" games offer little real learning. Do not expect any educational value from TV or video games unless they are specifically recommended by your child's teacher.
- Set a pre-defined number of minutes that your child can watch TV or play video games and stick to it. Kids should study and complete their chores before playing.



HELP YOUR CHILD LEARN TO USE THE INTERNET SAFELY

The internet has become a major part of how we learn and communicate. Show your child how to use the internet effectively and safely.

- Spend time online with your child. Ask her to explain what she is doing and why. Ask her to show you her favorite websites and to tell you what she likes about them.
- Help your child locate appropriate websites. Point her in the direction of sites that can help her with reading and numeracy skills.
- Closely supervise what websites your child uses. Beware of both inappropriate content and sites with advertising aimed at kids. Limit your child's access to specific sites you have seen and approved ("whitelisting") or at least use filters to block inappropriate sites.
- Monitor the amount of time that your child spends online. Surfing the internet can be just as time-consuming and non-educational as watching TV.
- Teach your child rules for using the internet safely. He should never:
    - tell anyone his computer password;
    - use bad language or send mean or untrue messages;
    - give out any personal information, including his name or the names of family members, home address, phone number, age, school name., or
    - arrange to meet a stranger that he has met online.

MAKE HOMEWORK A PRIORITY

Establish the importance of education as a core value in your household. Your child should see education not as something that just happens 'at school' but as a fundamental part of their young lives.

- Make homework a priority in your daily family life. Even if study time is for only a few minutes a day, make sure it is treated as a priority over other activities. Do this consistently from a young age and your children will understand, through your actions, the importance of school and education.

- Try to make homework engaging, but don't make false promises about homework always being fun. You are not going to be able to compete with video games in the fun department.

- Have a designated place for your child to study. The area should have good lighting and it should be fairly quiet. Provide supplies such as pencils, pens, erasers, paper and a dictionary. If possible, keep these items together in one place. This is not a place for toys or other distractions.

- Set a regular schedule for homework. Study time should be before TV or playtime, thus incentivizing children to finish their work and not procrastinate. Having a regular homework time clarifies expectations and helps children finish assignments.

- Remove distractions. Turn off the TV and discourage your child from making and receiving telephone calls or texts during homework time.

- Don't expect or demand perfection. When your child asks you to look at what she's done, from tracing a figure 8 to finishing a math assignment, show interest and praise her when she's done something well. If you have suggestions, make them helpful. Demand effort and focus, not perfect results.

- Focus on the process, not the results. What you are looking for is effort. Praise effort and progress. Do not criticize mistakes.

- Don't overdo it!

STUDY OUTSIDE OF SCHOOL

A regular program of academic study outside of school is critical to ensure your child's success in school. It will allow your child to progress academically at their own pace, regardless of what is happening in the classroom.

Just as important, regular home study will help them develop good study habits and reinforce the importance of education.

- At home, allow your child to work as independently as possible. Independent learning, especially overcoming challenges, builds confidence, resiliency and good study habits.

- Home study should be regular (preferably daily). The length of study does not have to be long and depends very much on your child's age and abilities. For some five-year-olds, 5-10 minutes a day of focusing on their studies may be enough.

- Avoid summer learning loss by continuing home study during the summer months.

- Home study can consist of homework, or, in the absence of sufficient homework, it is up to the parent to organize the study materials. This may consist of practicing a particular skill, working on traditional exercise books, educational computer programs or other supplementary activities to enhance their learning.

- If you do not have the time to oversee your child's home study, then consider some sort of academic after-school program.

CHOOSE STUDY MATERIALS CAREFULLY

To make the most of your child's home study time, choose the materials he uses carefully:

- Ask yourself:
  - how much of my child's time is being spent learning vs. 'time wasting' with a particular activity?
  - How well is he being engaged?
  - Is he progressing through materials or repeating work at the same level?

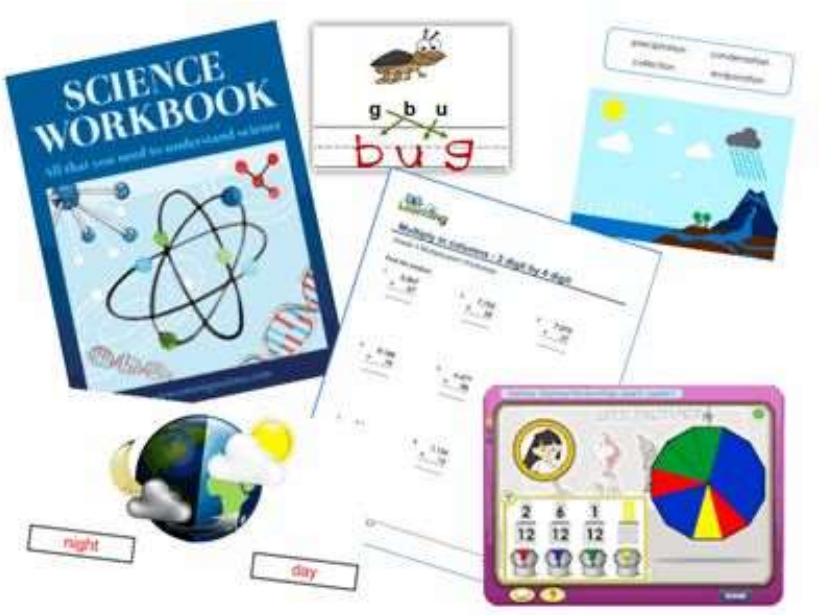
- Choose activities based on their educational value and engagement level rather than their "fun" quotient. Ideally, kids should find study materials interesting and challenging. Activities can also be fun, but don't build the expectation that studying will always be fun, or that only fun things are worth doing.

- Be organized, so that you always have materials available for your child to progress through in a meaningful way.

- Remember to emphasize reading and math. If in doubt, materials which are based on school curriculums are a safe bet.

- Be realistic about your own time constraints. If you do not have the time to organize materials every day for your child, then find a system (set of workbooks, online program, tutoring program, etc.) that will make the process easier for you.

- If you are struggling to find appropriate activities, ask your child's teacher for recommendations.



USE ONLINE LEARNING CAUTIOUSLY

- There are countless free educational websites, many with quality materials. However, most of these sites lack the structure to ensure your child will progress through material in a logical way. Kids will tend to repeat the easiest or most entertaining activities rather than challenging themselves. If you use these sites, manage your child's use of them closely.

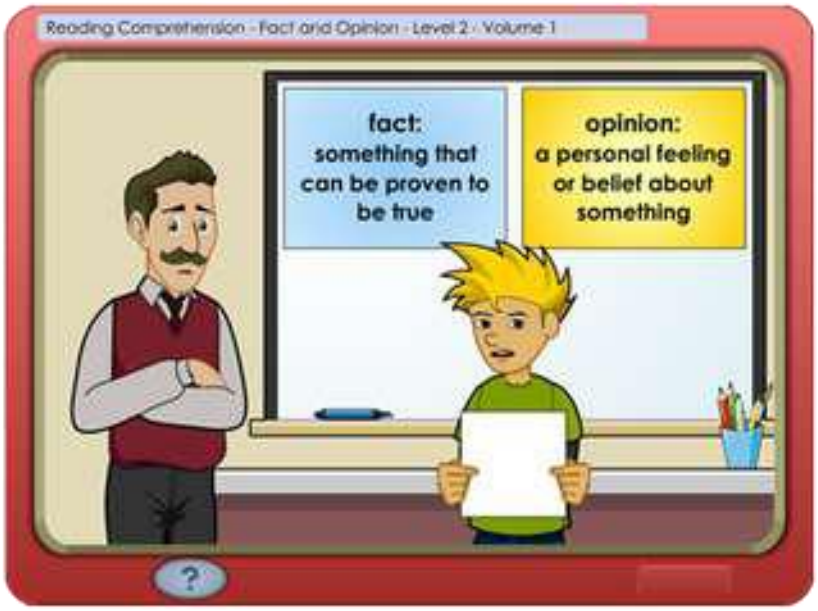
- Many commercial programs make significant claims of achievement and big promises, including that the program will "adapt" to your child's specific needs. Often, the promises exceed the reality, and no program is going to work well with all children in all circumstances. Ask your children's teacher for suggested programs and, most of all, observe carefully and decide for yourself if it is worthwhile.

- Don't overdo online learning at the expense of traditional activities. Working on paper encourages children to slow down, read and think. In contrast, the way we have learned to use screens promotes scanning, guessing and tapping.

  As the difficulty of exercises increases, the ability to work things out by hand (calculations, drawings, underlining words, etc.) in an unrestrained fashion is important. It is how people have been learning for centuries.

  Paper-based activities also leave a trail of actual work, instantly comprehensible to a parent, tutor or teacher. A computer-generated "progress report" does not give the same insights.

  We recommend that students take a balanced approach, combining traditional learning with online programs.



ENCOURAGE YOUR CHILD TO BE RESPONSIBLE AND WORK INDEPENDENTLY

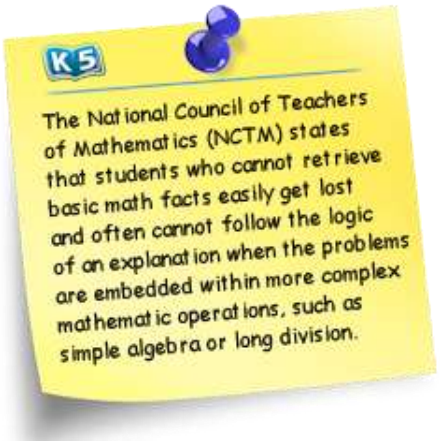
Taking responsibility and working independently are important qualities for school success.

- Establish rules. Every home needs rules that children know and can depend upon. Make sure you enforce the rules consistently.
- Make it clear to your child that he has to take responsibility for what he does, both at home and at school. For example, do not automatically defend your child if his teacher tells you that he is often late to class or is disruptive when he is in class. Ask for his side of the story. If a charge is true, let him be accountable for his choices.
- Promote respect for your child's teachers. Never say or do anything that will undermine their authority.
- Work with your child to develop a schedule of jobs to do around the house. Children may complain about chores but helping out gives them a sense of being productive members of the household and is good for their self-esteem.
- Show your child how to break a job down into small, manageable steps, then to do the job one step at a time. This works for everything— cleaning a room or completing a big homework assignment.
- Make your child responsible for getting ready to go to school each morning—getting up on time, making sure that he has everything he needs for the school day and so forth. If necessary, make a checklist to help him remember what he has to do.
- Always look for new opportunities to let your child do something for themselves or 'on their own'. Get out of the habit of doing everything for them which can create helplessness instead of confidence.

ELEMENTARY SCHOOL ACADEMICS: THINK READING AND NUMERACY

Kids learn many things during the elementary school years, from self-discipline to working in groups, but the critical *academic* skills are reading (literacy) and basic math (numeracy). The ability to read quickly and effectively, and competency with basic number operations, are the core skills that kids use to learn other subjects. The content that kids learn in social studies, science or other classes is interesting and helps them learn to think critically. However, that content will be revisited again in higher grades in much more depth and is less critical in elementary school.

- Emphasize basic reading and math skills in all home learning activities.



- Encourage reading and language-based activities (writing, spelling, etc.) throughout the day.

- Emphasize basic math skills and ensure sufficient practice is done to achieve proficiency. Math, to a greater degree than other subject areas, requires proficiency in basic skills before students move on to more difficult tasks. For example, if a child has not mastered his multiplication tables, then he will struggle with the concepts of multi-digit multiplication, because he will be spending all of his time performing basic calculations instead of trying to understand more advanced concepts.

- Math anxiety and underachievement in math is widespread, and largely caused by children not mastering the basics. Ensure your child gets enough practice and masters these skills.

- Encourage mental math (doing math operations in your head) activities and help ensure your child's overall fluency and confidence with numbers.

- A significant part of the challenge of early math is not only about understanding concepts, but mastering algorithms (the steps to solve different types of problems). Kids don't typically struggle with conceptualizing addition, but it takes a lot of practice, including memorization of math facts, to gain confidence and do it competently.

- The key is learning by doing, repetition and not proceeding on to harder tasks until underlying skills are mastered.

WORKING WITH TEACHERS AND SCHOOLS

Many teachers say they don't receive information from parents about problems at home. Many parents say they don't know what the school expects from their children or from them as parents. Sharing information is essential, and both teachers and parents are responsible for making it happen.

The following questions and answers can help you get the most out of talking to your child's teacher:

Q: WHAT DO I DO FIRST?

Learn everything that you can about your child's school.

Exploring your school's websites can provide you with access to all kinds of information—schedules of events, names of people to contact, rules and regulations, and so forth.

Read your school's handbook; if your school doesn't have a handbook, ask questions. What special programs does the school offer? How does the school measure student progress? What are the school's rules and regulations?

Most of all, ask: "What can I do to support, academically or otherwise, what the teacher is trying to accomplish in the classroom?"

Keep informed throughout the school year. If your schedule permits, attend PTA / PTO / PAC meetings.

The best schools have active parental involvement. Think about how you can help your school community.

Q: WHAT IF MY CHILD HAS A PROBLEM?

Contact the teacher if your child has an ongoing problem with his schoolwork. You shouldn't wait for report-card time to begin addressing any difficulties. By alerting the teacher, you can work together to solve a problem in its early stages.

Approach the teacher with a cooperative spirit. Believe that the teacher wants to help you and your child, even if you disagree on some things.

Q: WHEN SHOULD I TALK WITH MY CHILD'S TEACHER?

Contact your child's teacher at the beginning of the year or as soon as you can. Get acquainted and show your interest. You are your child's best advocate.

Tell teachers what they need to know about your child. If she has special needs, make these known from the beginning.

If you notice a big change in your child's behavior, school performance or attitude during the school year, contact the teacher immediately.

Report cards are one indication of how well your child is doing in school. But you also need to know how things are going between report cards. For example, if you think your son is having trouble in math, contact the teacher to find out what is being studied and how you can provide extra help, as well as when the next math test is scheduled. Address the problem before it gets bigger.

Focus on supporting the teacher, not on criticizing or making demands. You are both trying to accomplish the same things.

Q: HOW DO I GET THE MOST OUT OF PARENT-TEACHER CONFERENCES?

Be prepared to listen as well as to talk. It helps to write out questions before you leave home. Be prepared to take notes during the conference and ask for an explanation if you don't understand something.

In conferences, the teacher should offer specific details about your child's work and progress. If your child has already received some grades, ask how your child is being evaluated.

Talk about your child's talents, skills, hobbies, study habits and any special sensitivities such as concern about weight or speech difficulties.

Tell the teacher if you think your child needs special help and about any special family situation or event that might affect your child's ability to learn. Mention such things as a new baby, an illness or an upcoming move. Ask about specific ways to help your child at home. Try to have an open mind.

At home, think about what the teacher has said and then follow up. If the teacher has told you that your child needs to improve in certain areas, check back in a few weeks to see how things are going.

Q: WHAT IF I DON'T AGREE WITH A SCHOOL RULE OR WITH A TEACHER'S ASSIGNMENTS?

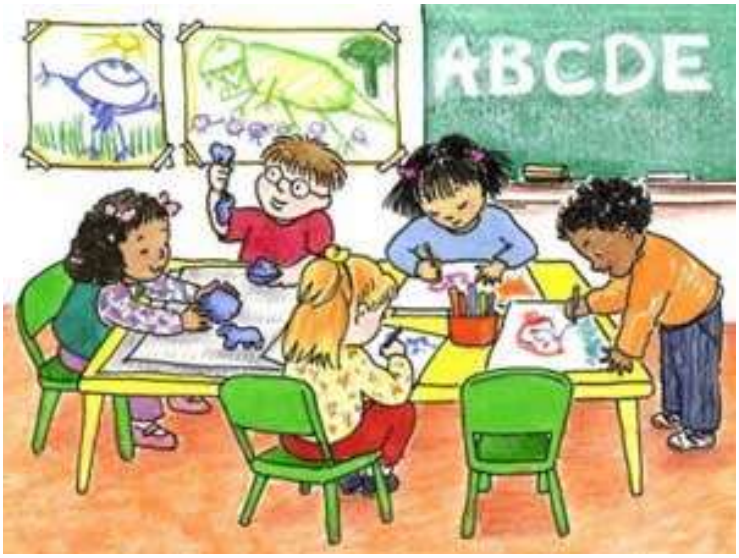
First, be careful about disagreeing with the teacher or speaking negatively about him or the school in front of your child. It is counterproductive to undermine the teacher's or school's stature in your child's eyes.

Remember that a school's rules and a teacher's assignments are designed for the benefit of the school or classroom as a whole, and they can't always be optimized for each individual student. Try to understand the bigger context and be reasonable in your expectations.

Set up a meeting to talk about the issue. Before the meeting, plan what you are going to say—why you think a rule is unfair or what exactly you don't like about an assignment. Try to be positive and remain calm. You will accomplish more by being constructive rather than adversarial.

Q: WHAT'S THE BEST WAY FOR ME TO STAY INVOLVED IN MY CHILD'S SCHOOL ACTIVITIES?

Attend school events. Go to sports events and concerts, attend back-to-school night, parent-teacher meetings and awards events. Volunteer in your school. The better you know the school's teachers and other parents, the faster you will be able to identify problems that may occur.



HELPING YOUR CHILD WITH TEST-TAKING

- Talk to your child about testing and explain why schools give tests. Explain that tests are yardsticks that teachers and schools use to measure how well students are learning. These tests are associated with the grades on report cards. The results tell the teacher, students and parents whether students are keeping up with the class, need extra help or are ahead of other students.

- Encourage your child. Praise her for the things that she does well. If your child feels good about herself, she will do her best on a test. Children who are afraid of failing are more likely to become anxious and more likely to make mistakes.

- Don't place too much emphasis on test scores. This is elementary school. Emphasize learning, not scores. Demand effort and focus, not perfect results.

- Celebrate good test scores, but don't get upset because of a poor one. Many things can influence how your child does on a test. Use mistakes as a guideline for subject areas that need to be revisited. Consider repeating the test at home later. Celebrate effort and improvements.

- Meet with your child's teacher to discuss his progress. Ask the teacher to suggest activities for you and your child to do at home to improve your child's understanding of schoolwork.

- Make sure that your child attends school regularly. Remember, tests reflect children's overall achievement. The more effort and energy your child puts into learning, the more likely it is that he will do well on tests.

- Provide a quiet, comfortable place for studying at home and make sure that your child is well rested on school days. Children who are tired are less able to pay attention in class or handle the demands of a test.

- Help your child avoid test anxiety. It's good for your child to be concerned about taking a test. It's not good for him to develop "test anxiety." Students with test anxiety can become very self-critical and lose confidence in their abilities. Instead of feeling challenged by the prospect of success, they become afraid of failure. Emphasize the learning process, not the results to your child.

- After the test, review the graded exam paper with your child to discuss where he had difficulty and why. Often a child simply misread a question. Reviewing test results is especially important for classes in which the material builds from one section to the next, as in math.

WHAT KIDS LEARN IN KINDERGARTEN

Math Skills

In kindergarten math, kids work on the following skills:

Numbers and operations
Know numbers by name
Learn the count sequence
Count objects
Compare numbers
Add and subtract up to 10
Work with numbers 11—19

Measurement
Measure length, height, weight
Compare measurements of two objects
The relative position of objects

Geometry
Identify and describe shapes
Compare and create shapes
2D and 3D shapes

Numbers and operations

Know numbers by name
Students learn:
- the words for numbers.

Example: one is 1 and two is 2.
- to write numbers from 0 to 20.

Count sequence
Kids learn the count sequence from 1 to 100, counting by ones and tens.

Add and subtract up to 10
Kindergarten students learn to understand:
- addition as putting together and adding to
- subtraction as taking apart and taking from

Students use objects, mental images, fingers, drawing, sounds to:
- solve addition and subtraction word problems within 10
- decompose numbers from 10 and less into pairs or more that one way.

Example: 6 = 3 + 3 and 6 = 4 + 2 and 6 = 5 + 1.
- find the number that makes 10 when added to the given number.

Example, for the number 5 you need to add 5 to make 10.

Count objects
Students learn the relationship between numbers and quantities, as follows:
- Pointing at objects and saying the number out loud.

Example: 1 egg, 2 eggs, 3 eggs.
- In a group of objects, they learn the last number said is the total number of objects.

Example: there are three eggs in the basket.

Compare numbers
Students learn to compare two groups of different number of objects as greater than, less than and equal to.
Example: a basket of 6 eggs is greater than a basket of 3 eggs.

Work with numbers 11 – 19
Once they've mastered 1 – 10, students move onto learning the decomposition of 11 to 19 as ten ones and further numbers.
Example: 18 is composed of ten ones and eight ones.

WHAT KIDS LEARN IN KINDERGARTEN

Measurement

Measure length, height, weight
Students learn that objects are measured in different ways by length, height and weight.
They learn to compare the measurements of two objects.

Relative position of objects
Students cover the relative position of objects, such as above, in between, below, next to, in front and behind.

Geometry

Shapes
Students cover common shapes, such as squares, rectangles, triangles and circles and learn:

- how to describe them.

Example: squares have four equal sides, circles are round.

- to recognize shapes in everyday items.

Example. pie slices are triangles.

- to use building blocks and drawing to create shapes.

2D and 3D shapes
Students learn the differences and similarities between two-dimensional and three-dimensional shapes.

WHAT KIDS LEARN IN KINDERGARTEN

Reading & Writing Skills

In kindergarten reading and writing, kids work on the following skills:

Grammar
Letters
Nouns & verbs
Capitalization & punctuation
Prepositions

Phonics
Phonetic words

Sight words
Simple common words

Reading comprehension
Books and texts

Vocabulary/Spelling
Categorizing words
Multiple meaning words
Spell simple words

Writing
Drawing and simple writing

Grammar

Letters
Students learn to:
- name upper and lowercase letters and match them to their sound
- trace and print upper and lowercase letters

Capitalization & punctuation
They learn about:
- Question words

Who, what, when, where, how, why
- Capitalizing the first word in a sentence
- Placing a period at the end of a sentence

Nouns & verbs
Students work on:
- Frequent nouns and verbs
- Forming regular plural nouns by adding s, or, es

Example: cat – cats, peach – peaches

Prepositions
They work on the most frequent prepositions
to, from, on, out, on, off, for, of, by, with

Phonics

Phonetic words
- Students sound out and write the letter or letters for beginning, middle and ending vowel, consonant and blended sounds of words.

Example: st for star, ending sound t for cat
- They spell simple words phonetically (the way they sound).
- They sound out words by their individual phonetic sounds.

Example: cat – k/a/t
- They start to recognize and produce words that rhyme.

WHAT KIDS LEARN IN KINDERGARTEN

Sight words

Simple common words
They learn simple, common words by sight
Example: I, a, the, and, to

Reading comprehension

Books & texts
Students learn about books:

- that you read words from left to right, top to bottom of each page
- recognize that words and sentences are represented by a sequence of letters
- that words are separated by spaces
- with adult help identify the author, title, characters, setting and events of the story
- ask and answer questions about stories and other texts
- describe what the illustrations in a story depict
- recognize different texts: fiction, non-fiction, poems

Writing

Drawing and simple writing
Students will use drawing and writing to:

- re-tell a story they've been read
- tell a story they've made up themselves
- state an opinion
- give information

WHAT KIDS LEARN IN KINDERGARTEN

Spelling

Spelling simple words

- Students start to spell simple words phonetically (the way they sound)
- They also learn to tell words apart by the letters that sound different.

Example: bag, big, bug

Vocabulary

Categorizing words

Students explore the meaning of words by:

- sorting them into categories

Example: shapes: triangles, squares, circles,
or fruit: apples, pears, bananas

- relating the words to their synonyms (similar words) and antonyms (opposite words)
- finding real-life connections between words and their use

Example: water is wet, the desk is hard

- learning shades of meaning by acting them out

Example: crawl, walk, run

Multiple meaning words

Students gain insight to new meanings for familiar words

Example: understanding that the word duck is a bird (noun)

WHAT KIDS LEARN IN KINDERGARTEN

Science Skills

In kindergarten science, kids work on the following skills:

Physical sciences
Pushes and pulls
Energy
Float or sink
Objects and materials

Earth sciences
The four seasons
Weather
Resources and conservation

Experiments
Basic scientific principles

Life sciences
Structures of living things
Living or non-living
Types of animals
Animal habitats and homes
Animal and plant activity

Physical sciences

Pushes and pulls
Students learn about pushing, pulling, stopping and colliding objects by strengths or directions.
Example: pulling an object by a string, stopping a rolling ball, two objects colliding
They work on a project where they design an object that has to achieve a push or pull goal.
Example: a four-wheeled object to run the furthest down a ramp

Energy
Students learn that light and heat are sources of energy.
- They look at the effect of sunlight on sand, soil, rocks and water
- They build structures to create shade from the sun

Examples: the use of umbrellas, canopies and tents
They learn about liquid and solid objects, and how some solid objects melt to become liquids
Examples: ice melts in the sun: solid to liquid, a building block does not: it's always a solid

Float or sink
Students explore objects that float and objects that sink
Example: a stone sinks in a bucket of water, a piece of paper floats on top of the water

Objects and materials
Students are asked to describe the physical properties of objects
Example: color, shape, texture
They also learn to describe materials that make different objects
Example: cloth for a shirt, wood for a house

WHAT KIDS LEARN IN KINDERGARTEN

Earth sciences

The four seasons
They learn the four seasons; and to match the seasons to activities and weather conditions.
Example: raking leaves in the fall, making a snowman in the winter

Weather
Students learn about weather conditions, including severe weather
Example: sunny, cloudy, rainy, storm, hurricanes
They also learn to observe weather patterns
Example: it's cooler in the morning and warmer in the afternoon, counting the number of cloudy days vs sunny days in each month

Resources and conservation
Students discuss solutions to reduce the impact of humans on the land, water, air, other living things in our environment
Example: recycling cans, bottles and paper

Life sciences

Structures of living things
Students learn to identify parts of plants and animals
Example: stem, roots, leaf, arms, legs, wings
They cover the similarities and differences between plants vs. animals
Example: plants and animals both need water to survive

Types of animals
They learn about the types of animals
Example: insects, birds, mammals, reptiles

Animal habitats and homes
They study animal habitats and homes
Example: monkeys live in the jungle, bats live in caves

Living or non-living
Students identify living and non-living things
Example: a bear is a living thing, a book is a non-living thing

Animal and plant activity
They cover the relationship between what animals and plants need and the places they live.
Example: deer eat grass, berries and plant buds, so they live in the forest
They study how plants adapt to their environment
Example: how the cactus adapts to living in the desert
Students learn how plants and animals can change their environment to meet their needs.
Example: tree roots break concrete, a squirrel digs into the ground to hide its food

WHAT KIDS LEARN IN KINDERGARTEN

Experiments

Basic scientific principles

Students learn the basic scientific principles of observing, predicting and measuring in learning about the earth, physical and life sciences. They learn to:

Ask questions based on what they know and observations they have made.

Compare objects based on what they look like: shape, color, size.

Describe how objects move or behave.

Observe changes in size, shape, texture, color of objects.

Example: the change in color of leaves in the fall

Predict what happens when objects are subjected to tests.

Example: what happens when you put water in the freezer

Recognize patterns and sort objects.

WHAT KIDS LEARN IN KINDERGARTEN

Social Skills

In kindergarten, teachers help students work on the following social skills:

Right and wrong
Understanding the difference between right and wrong, and that there are consequences for students' actions.

Express emotions
Using their words to express how they feel and what they need.

Group work/co-operation
To work in groups to achieve a common goal.

Listen to and follow direction
Learn to pay attention to instructions from the teacher and take on board what the teacher is saying.

Sharing
Taking turns, using nice words and sharing toys when playing with other children.

WHAT KIDS LEARN IN GRADE 1

Math Skills

In grade 1 math, kids work on the following skills:

Numbers and operations
Counting up to 120
Place value: tens and ones
Us place value to add & subtract
Word problems within 20
How adding & subtracting relate to each other
Add & subtract within 20
The meaning of the equal sign
Working with equations

Measurement
Measure length
Tell time
Organize objects

Geometry
Describe shapes
Circles & rectangles into parts

Numbers and operations

Counting up to 120
Students learn to count up to 120, as well as read and write the numerals up to 120.

Word problems within 20
Students use addition and subtraction within 20 to solve word problems.
Example: adding to, taking from, putting together, taking apart and comparing numbers in full word problem formats.
They often use objects and drawing to work out the word problems.

Place value
They learn to understand two-digits numbers represent amounts of tens and ones.
Example: 14 is 1 ten and 4 ones, the number 50 represents 5 tens and 0 ones
They work on comparing two two-digit numbers as greater than (>), equal to (=) and less than (<).

Use place value to add & subtract
They use their understanding of tens and ones to add two-digit numbers within 100.
Students will use models and drawings to explain the thinking involved.
Example: 23 + 34 is represented by 5 (2+3) tens and 7 (3 + 4) ones. The sum is 57.
They learn to add 10 or subtract 10 from a two-digit number in their heads.
They subtract multiples of ten from numbers up to 90 using models and drawings to explain the thinking involved.
Example: 33 – 10 is represented by 2 (3 – 1) tens and 3 (3 – 0) ones. The sum is 23.

WHAT KIDS LEARN IN GRADE 1

Numbers and operations

How adding & subtracting relate to each other
They learn how numbers correlate to one another in addition and subtraction.
For example:
In addition: *if 2 + 8 = 10, the 8 + 2 = 10*
In subtraction: *10 – 8 = ?, what number would you add to make 10 from 8: 2.*

Add & subtract within 20
Students use strategies to make 10 to add and subtract within 20.
For example:
In addition: *8 + 6 is the same as 8 + 2 + 4 is the same as 10 + 4 = 14*
In subtraction: *13 - 4 is the same as 13 - 3 - 1 is the same as 10 - 1 = 9*
They also learn the relationship between addition and subtraction.
For example: 8 + 4 = 12, then 12 – 8 = 4.

The meaning of the equal sign
They work on the meaning of the equal sign by determining if addition and subtraction equations are true or false.
For example: is 6 = 6 true or false? Is 8 – 1 = 7 true or false? Is 2 + 4 = 8 true or false?

Working with equations
They learn to work out the unknown number in an equation.
For example: 7 + ? = 14, or 6 = ? – 2.

WHAT KIDS LEARN IN GRADE 1

Measurement

Measure length
They study:
- how to order objects by length
- to compare the lengths of up to three objects
- to use the correct terms to describe the objects.

For example: long, longer, longest, or short, shorter, shortest.
They work out the measurement of longer objects using shorter objects as units of measurement.

Tell time
They learn to tell time in hours and half-hours on digital and analog clocks.

Organize objects
They learn to organize objects in up to three categories, such as shape, color, size, etc. They use drawings or charts to represent the objects in each category.

Geometry

Describe shapes
Students learn to define, draw and build shapes.
For example: triangles are closed shapes with three sides.
They use sticks to create a closed shape with four equal sides, tell us the name of this shape.
They work on distinguishing attributes that do not define shapes, such as size, color or orientation.

2D and 3D shapes
Students learn the difference and similarities between two-dimensional and three-dimensional shapes.

WHAT KIDS LEARN IN GRADE 1

Reading & Writing Skills

In grade 1 reading and writing, kids work on the following skills:

Grammar
Letters
Nouns & verbs
Pronouns
Adjectives
Determiners
Conjunctions & prepositions
Sentences
Capitalization & punctuation

Phonics
Sounding out words

Sight words
Read common words by sight

Reading comprehension
Elements of texts
Read aloud

Vocabulary/Spelling
Understanding words
Categories
Conventional spelling

Writing
Opinion pieces
Informative, explanatory pieces
Narrative pieces
Gather facts & information

Grammar

Letters
Students print all upper- and lowercase letters.

Adjectives
They learn about matching adjectives to nouns, and identifying and writing adjectives in sentences.
Example: Danny caught the red ball. Red is the adjective.

Nouns & verbs

- They learn to use common, proper and possessive nouns.

Examples: car, teacher – common nouns; Central Park, Mr. Higgins – proper nouns; mother's car – possessive noun

- They use singular and plural nouns in sentences, paying attention to the verb conjugation.

Example: He jumps; We jump

- They work on verbs in the past present and future tenses.

Examples: Yesterday, we played in the park. Today, I play in the park. Tomorrow, I will play in the park.

Determiners
They work with definite (the) and indefinite (a, an) articles. They also learn to use demonstratives: this, that, these, those.

Conjunctions & prepositions
They work on frequently used conjunctions (and, but, or, so, because), and frequently used prepositions (during, toward, beyond).

Pronouns
They learn to use personal, possessive and indefinite pronouns.
Examples: I, he, they – personal pronouns;
mine, his, theirs – possessive pronouns;
anybody, somebody, everybody – indefinite pronouns.

WHAT KIDS LEARN IN GRADE 1

Grammar

Sentences

Students write sentences from jumbled words.

They learn to tell the difference between fragments and full sentences.

Students identify types of sentences:

- Declarative: a statement
- Imperative: a command
- Interrogative: a question
- Exclamatory: expression of strong feelings

Capitalization and punctuation

- Students learn to capitalize the first word in a sentence, as well as dates and the names of people and places.
- They work on placing commas to separate words in a series, as well as in dates.
- They learn that sentences end with a period, question mark or exclamation mark.

Phonics

Sounding out words

Students learn to:

- Distinguish long and short vowel sounds in single-syllable words.

Example: cat – bad

- Blend phonemes to sound out words.

Example: bl in blue, pl in plan

- Isolate and pronounce initial, middle vowel and final sounds to sound out words.

Example: k/a/r – car

- Know the sounds made by two-consonant combinations, where those make one sound.

Example: ph, th, sh, ch

- Use word patterns and context to figure out unknown words.

Example: If I can read 'cat', I know how to read 'hat'.

- Use phonics (matching letters to their sounds) to read unfamiliar grade-level words.

Sight words

Read common words by sight

Students learn to read 'high-frequency' grade 1words by sight.

Example: all, am, soon, there, he, we, what, will

WHAT KIDS LEARN IN GRADE 1

Reading comprehension

Elements of texts

In reading, students learn to:

- Ask and answer questions about key details in a text or story.
- Retell stories, demonstrating their understanding of the central message.
- Retell key details of a non-fiction text, describing connections between people, places, events, ideas of the text.
- Describe characters, settings and major events, including comparing and contrasting the experiences of the characters in a story.
- Distinguish between the information provided by pictures and the information provided by words in a text.
- Identify words and phrases that suggest feelings/appeal to the senses.
- Identify who is telling the story.

Read aloud

Students learn to actively engage with more challenging texts by teachers reading aloud and through shared reading.

Vocabulary/spelling

Understanding words

Based on grade 1 level reading, students learn to understand the meaning of new words, in particular:

- Context clues: the use of clues in a sentence
- Multiple meaning words

Example: bark: the sound a dog makes, or the outer cover on the trunk and branches of trees

- Shades of meaning

Example: big, large, huge

Categories

- Students work on sorting words into categories.

Example: shapes, colors, clothing, animals, plants

- They work on defining words by category and key attributes.

Example: a swan is a bird that swims.

- They also identify real-life connections between words and their use

Example: name places at home that are cozy.

Conventional spelling

Students learn to spell words with conventional spelling.

Example: hat, cat, bat

WHAT KIDS LEARN IN GRADE 1

Writing

Opinion pieces

Students write opinion pieces:

- Introducing the topic of the book they are writing about
- Stating their opinion on that topic
- Supplying reasons for that opinion
- Ending with a conclusion

Narrative pieces

Students write stories in which they:

- Tell or recount two or more sequenced events
- Include details about what happened
- End the story with a sense of closure

Informative/explanatory pieces

Students work on informative/explanatory texts where:

- They name a topic
- Write facts about the topic
- End with a conclusion

Gather facts & information

In groups and with adults, students work on shared research projects to gather facts and information on a given topic.

WHAT KIDS LEARN IN GRADE 1

Science Skills

In grade 1 science, kids work on the following skills:

Physical sciences
Light & sound
Forces & machines
Properties of materials

Earth sciences
Sun, moon & stars
Weather & climate
Plants, animals & the Earth
Earth's systems

Life sciences
Plants & animals

Experiments
Basic scientific methods

Physical sciences

Light & sound

- They learn that objects in darkness can only be seen when you shine a light on them.

Example: a pinhole box, or watch a vide of a cave explorer using a flashlight

- They work with objects placed in the path of a light beam.

Example: clear plastic presents as transparent, wax paper as translucent, and a mirror as reflective

- Students explore that vibrating materials can make a sound and that sound can make materials vibrate.

Example: plucking a stretched string, hitting a metal bell

- They build a device that uses light or sound to communicate over a distance.

Example: a flashlight to send signals, paper cups and string telephones, drum beats

Forces & machines

- Building on skills from kindergarten, grade 1 students continue to learn about:
- Forces and motions: they learn about the direction an object is moving.

Example: how far a marble rolls down a ramp; the direction force needs to be applied to stop an object

- Simple machines: they start to learn about simple

Properties of materials

- Students describe and classify different kinds of materials by their similarities and differences.

Example: color, texture, size, flexibility, hardness

- They explore how well suited the properties of materials are for specific purposes.

Example: strength of a table, texture of a shirt, objects that sink and those that float, how magnets attract or repel

- They assemble pieces to make them into new objects.

Example: blocks to build a tower

- They explore the changes of heating and cooling; and how those processes can be reversed in some cases, and in some cases not

Example: water can be frozen and then melt into liquid; butter can melt, but not return to its solid state

WHAT KIDS LEARN IN GRADE 1

Earth sciences

Sun, moon & stars

- Students learn to observe the patterns of the sun, moon and stars.

Example: the sun and the moon rise in one part of the sky, and set in another part of the sky; stars can only be seen at night

- Students observe how daylight changes through the seasons.

Example: compare the amount of daylight in winter to the amount in summer

Plants, animals & the Earth

- Students explore how plants and animals (including humans) can change the environments to meet their needs.

Example: how squirrels dig into the ground to hide its food

- They learn about the needs of different plants and animals and the places they live.

Example: deer live in the forest where they eat leaves and buds from trees

- They will discuss solutions to reduce the impact of humans on their environment and other living things.

Example: reusing paper and recycling cans and bottles.

Weather & climate

- Students observe local weather conditions and weather patterns over time.

Example: the number of sunny, windy and rainy days in a month.

- They learn about severe weather and how to prepare for it. An emphasis will be put on local forms of severe weather.
- They look at the seasons and how they differ.
- Student observe the effect of sunlight on the Earth's surface.

Example: a rock is warmer in direct sunlight and cooler when in the shade

- They use tools and materials to build a structure that reduces the warming effect of the sun.

Earth's systems

- They learn about earthquakes and volcanoes.
- Students compare ways to slow down or prevent wind or water from changing the shape of the land.

Example: different designs of dikes

- They create a model to represent the shapes of land and bodies of water in a specific area.

WHAT KIDS LEARN IN GRADE 1

Life sciences

Plants & animals

- They explore the diversity of animal and plant life in different habitats.
- Students learn about the lifecycle of plants and animals.
- Students use materials to explore how plants and animals use their external parts to survive and grow.

Example: protecting bikers by creating shells similar to turtle shells, stabilizing structures to replicate roots of trees

- They learn how animal babies learn to survive.

Example: the signals animal babies make: crying, cheeping and how the parents respond: feeding or protecting

- They look at how young plants and animals are not exactly like their parents.

Example: leaves that differ in shape and size from parent to offspring, how puppies are smaller than adult dogs

- They investigate if plants need sunlight and water to grow.
- They create a simple model that shows how animals disperse seeds and pollinate plants.

Experiments

Students begin to learn about scientific methods in doing experiments, such as:

- Classification and establishing order
- Designing an experiment
- Predictions
- Conducting an experiment
- Observation and measurement
- Questioning
- Explaining data
- Representing data on graphs or in tables

WHAT KIDS LEARN IN GRADE 1

Social Skills

Teachers focus on helping grade 1 students work on the following social skills:

Patience
Learning to wait their turn and paying attention without fidgeting.

Empathy
Being able to see other people's point of view and problem solve accordingly.

Acceptable behavior
As students begin to notice others' behaviors, teachers focus on rewarding good behavior in the classroom.

Assertiveness
Working on making eye contact and using "I" messages. Kids work on speaking up when they need to ask questions about a topic they don't understand.

Resilience
Teaching students that it's OK to make mistakes and that it takes effort to work to correct mistakes.

Rules & routines
Focusing on making the classroom a group effort based on rules, group work and a sense of routine.

WHAT KIDS LEARN IN GRADE 2

Math Skills

In grade 2 math, kids work on the following skills:

Numbers and operations
Place value
Count to 1,000
Compare three-digit numbers
Add & subtract to 1,000
Word problems

Measurement & data
Measure length
Word problems on length
Line diagram
Tell time
Word problems on money
Interpret data
Bar graphs

Geometry
Shapes
Partition rectangles
Dividing shapes

Numbers and operations

Place value
Students understand the three digits of a three-digit number are hundreds, tens and ones.
Example: 405 is 4 hundreds, 0 tens and 5 ones.

Compare three-digit numbers
Students compare two three-digit numbers as greater than (>), equal to (=) and less than (<).

Add & subtract to 1,000
Students work to:
- Fluently add and subtract within 20 using mental math.
- Fluently add and subtract within 100.
- Mentally add 10 or 100 to a given number from 100 – 900.
- Mentally subtract 10 or 100 from a given number 100 – 900.
- Add and subtract two numbers within 1,000 using models, drawings and written methods.

Example: 234 + 570 = 804; 820 – 543 = 277

- Add up to four two-digit numbers.

Word problems
- Solving one- and two-step word problems to add and subtract within 100.
- Odd and even numbers.
- Student determine if a group of up to 20 objects are even in number or odd.

Count to 1,000
Students learn how to count within 1,000, including:
- Skip counting by 5s, 10s and 100s.
- Read and write numbers to 1000 using base-ten numerals:

(1 thousands, 2 hundreds, 3 tens, 4 ones), number names (1,234) and expanded form (one thousand, two hundred, thirty-four).

WHAT KIDS LEARN IN GRADE 2

Measurement & data

Measure length
Students learn to:

- Measure the length of an object using rulers, yardsticks and measuring tapes.
- Estimate lengths of objects using inches, feet, centimeters and meters.
- Determine how much longer one object is than another object.

Word problems on length
Students solve addition and subtraction word problems involving length up to 100.

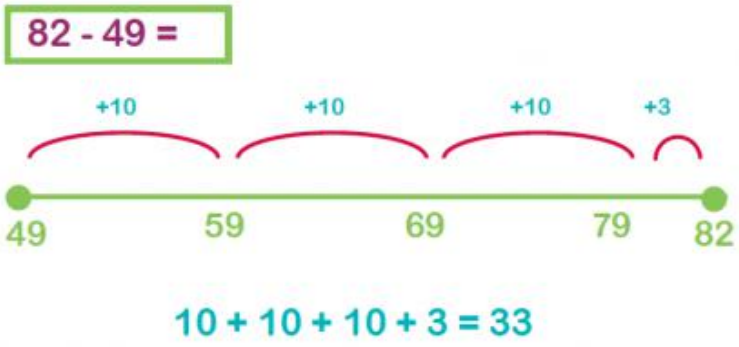
Line diagram
They learn to represent whole numbers that are spaced out at equal intervals on a number line.

Tell time
Students tell and write time from analog and digital clocks to the nearest five minutes.

Word problems on money
Students solve word problems involving dollars, quarters, dimes, nickels and pennies.
Example: you have 2 quarters and 2 dimes. How much does that make?

Bar graphs
Students read and create picture graphs and bar graphs to show measurements and quantities in up to four categories.
They solve addition, subtraction, and comparison word problems using information presented in a bar graph.

Interpreting data
Students measure the lengths of several objects and write down the lengths. They show the measurements by using a line plot.



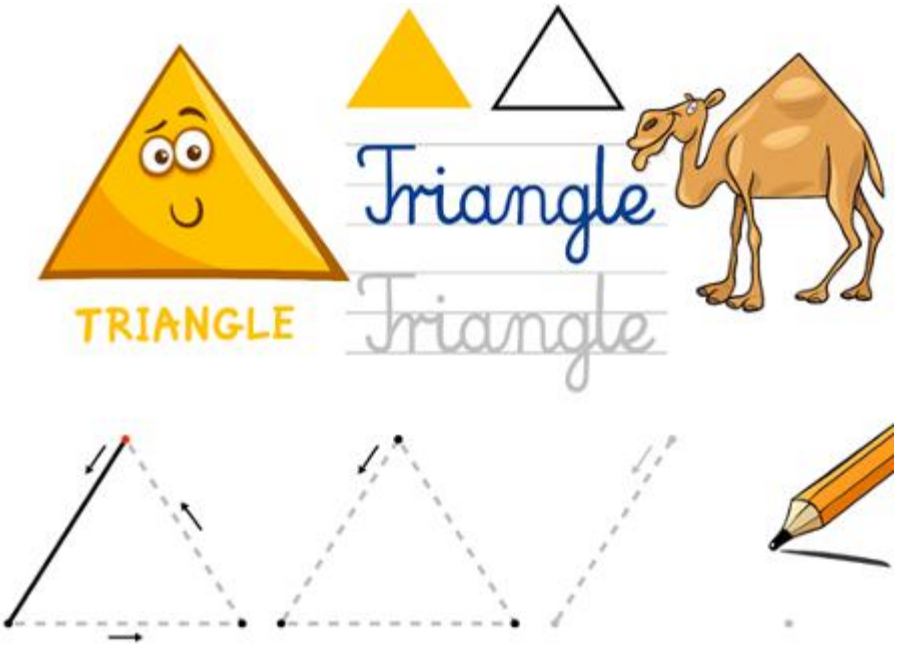
WHAT KIDS LEARN IN GRADE 2

Geometry

Shapes
Students learn to draw shapes and recognize the attributes of triangles, quadrilaterals, pentagons, hexagons and cubes.
Example: a tringle has three sides and three corners.

Partition rectangles
Students divide a rectangle into rows and columns of the same-size squares. They then count the number squares that make that rectangle.

Dividing shapes
They divide circles and rectangles into two, three and four equal shares and describe the shares as halves, thirds and quarters. They learn to recognize the equal shares represent a whole.
Example: four quarters make a whole.



WHAT KIDS LEARN IN GRADE 2

Reading & Writing Skills

In grade 2 reading and writing, kids work on the following skills:

Grammar
Nouns
Pronouns
Verbs
Adjectives & adverbs
Sentences
Capitalization & punctuation

Phonics
Decoding words

Sight words
Read common words by sight

Reading comprehension
Ask and answer questions
Retell stories
Main idea, purpose & structure
Characters
Supporting ideas
Key facts & information

Vocabulary/Spelling
Understand new words
Real-life connections
Shades of meaning

Writing
Opinion pieces
Informative, explanatory pieces
Narrative pieces
Research

Grammar

Nouns
Students learn to:
Use collective nouns
Form and use irregular plural nouns
Example: tooth – teeth, fish – fish

Pronouns
Students work on using reflective pronouns.
Example: myself, himself, ourselves

Verbs
Students form and use the past tense of irregular verbs.
Example: sit – sat, tell – told

Adjectives & adverbs
Students learn to tell adjectives and adverbs apart. They work on identifying, using and writing adjectives and adverbs in sentences and stories.

Sentences
Students learn to write, expand and rearrange complete simple and compound sentences.
Examples: Dad made dinner. My sister cleaned the dishes.
Dad made dinner, and my sister cleaned the dishes.

Capitalization & punctuation
Students learn to:
- Capitalize holidays, product names, and geographic names.
- Use commas in greetings and closings of letters.
- Use an apostrophe to form contractions and possessives.

Example: it is – it's, Mary's dog

WHAT KIDS LEARN IN GRADE 2

Phonics

Decoding words

Students use the following phonics and word analysis skills to decode words:

- Distinguishing the difference between **short and long vowels** in irregular words.

Example: bed – short e, feet – long e; sit – short i, find – long i

- Understanding common **two-syllable words** with long vowels.

Example: beside, invite

- Knowing the sound of common **vowel 'teams'** and letter pairs.

Example: oa as in boat, load; ee as in feet, seed

- Reading words with common **prefixes and suffixes**.

Example: useless, reuse

- Identify words that are **not written the way they sound.**

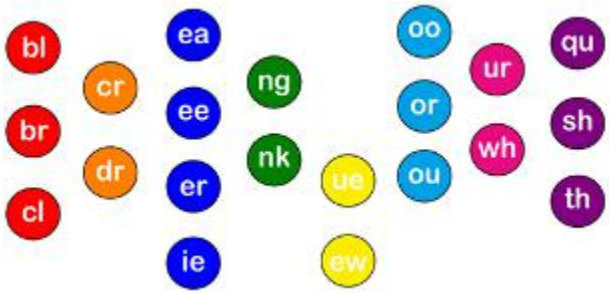
Example: answer, talk, friend

Sight words

Read common words by sight

Students learn to read 'high-frequency' words used in grade 2 reading by sight.

Example: your, around, right, green, very, don't



Vocabulary/spelling

Understand new words

Students learn to use different strategies to:

- Determine the meaning of **unknown** words

Example: using context clues in sentences, using picture clues in stories

- Clarify the meanings of **multiple meaning words**

Example: stick: a long, thin piece of wood, or to attach with tape/glue, or to remain in place

- Using root words to work out the meaning of **compound words**

Example: birdhouse - a house for a bird, bookshelf – a shelf for a book

- Use their understanding of **prefixes** to figure out the meaning of words

Example: un- means not – unhappy means not happy

Real-life connections

Students work on identifying real-life connections between words and their use.

Example: describe foods that are sweet

Shades of meaning

They learn to distinguish shades of meaning between closely related verbs and adjectives.

Example: walk, skip, run; big, large, huge

Spelling

Students work on learned spelling patterns.

Example: cage – badge, boy - boil

WHAT KIDS LEARN IN GRADE 2

Reading comprehension

Ask and answer questions
Students learn to ask who, what, where, when, why and how to gain an understanding of key details in a text.
Example: who is telling this part of the story? Why did the main character do that? Where is the story taking place?

Retell stories

- Students recount varying stories and determine the central message, lesson or moral of that story.
- They compare and contrast two or more versions of the same story by different authors or from different cultures.

Main idea, purpose & structure
They work on identifying the **main idea** of non-fiction texts and the focus of each paragraph in the text.
They learn to identify the main **purpose** of a text, including what the author wants to answer, explain, or describe.
Students learn to describe the overall **structure** of a story:

- How the beginning introduces the story
- What the main topic of a multi-paragraph text is
- How the ending concludes the action.

They learn to describe the connection between a series of historical events, scientific ideas or concepts, or step by step instructions in a text.

Characters

- They learn to describe how characters in a story respond to events and challenges in a story.
- They learn to decipher differences in points of view of characters.

Supporting ideas
They learn to describe how reasons support specific points made by the author in a text.

Key facts & information
Students use text features (e.g. captions, bold print, indexes, illustrations) to locate key facts and information, and to demonstrate understanding of its characters, setting, or story plot.

WHAT KIDS LEARN IN GRADE 2

Writing

Opinion pieces

Students will write opinion pieces where they:

- Introduce the topic or book they are writing about
- State an opinion
- Supply reasons that support that opinion, using linking words to connect the opinion and reason

Example: I believe a pet is good for the whole family, because the pet helps to cheer us up when we feel sad.

- Provide a concluding statement.

Informative/explanatory texts

Students write informative/explanatory texts where they:

- Introduce a topic
- Use facts and definitions to develop points
- Provide a concluding statement.

Narrative pieces

Students write stories in which:

- They recount an event or a short sequence of events
- Include details to describe actions, thoughts and feeling
- Provide a sense of closure

Research

Students will participate in shared research and writing projects

Examples: record science observations, read a number of books on a topic to produce a report

WHAT KIDS LEARN IN GRADE 2

Science Skills

In grade 2 science, kids work on the following skills:

Physical sciences
Matter
Energy
Electricity & magnetism

Earth sciences
Earth's systems
Sun, moon & stars
Weather & climate
Plants, animals & the Earth

Life sciences
Plants & animals
Human body

Experiments
Scientific methods

Physical sciences

Matter
Students investigate and classify different kinds of materials by what they see.
Examples: color, texture, hardness or flexibility.
They then analyze the data obtained from testing different materials.
Examples: varying strengths, flexibilities, hardness or absorbency.
Students study how an object made of a small set of pieces can be disassembled and made into a new object.
Example: using building bricks or blocks.

Energy
Students explore how changes caused by heating and cooling can be reversed in some cases and in other cases not.
Example: the changes of water and butter at different temperatures, or cooking an egg, freezing a plant leaf.

Electricity & magnetism
- Students start to learn about electric currents and circuits.
- They study how batteries work.
- They learn about the push and pull of magnetism.

WHAT KIDS LEARN IN GRADE 2

Earth sciences

Earth's systems

- Introduced in grade 1, students use information from several sources to show evidence that Earth events can happen quickly or slowly.

Examples: volcanoes, earthquakes – quickly, erosion – slowly.

- They compare many solutions to slow or prevent wind or water from changing the shape of the land.

Examples: dikes or windbreaks; shrubs and trees to hold back the land.

- They will develop a model to represent the shape of the land and bodies of water in an area.
- They collect information to find where water is found on Earth. They also learn that water can be found in liquid and solid forms.

Sun, moon & stars

Introduced in grade 1, students observe the sun, moon and stars to describe patterns.

Example: that the sun and moon move across the sky, that stars are visible at night.

They learn the amount of daylight changes throughout the year.

Weather & climate

Introduced in grade 1, students study local weather conditions to describe patterns over time.

Example: it's cooler in the morning than in the afternoon, or the number of sunny vs. rainy days in a month.

They also observe the effect of sunlight on Earth's surface, such as sand, soil, rocks and water.

Plants, animals & the Earth

Introduced in grade 1, students continue to study how plants and animals relate to the Earth:

- They use a model to represent the relationship between the needs of plants and animals, and the places they live.

Example: grasses need sunlight, so they grow in meadows away from trees.

- They explore solutions to will reduce the impact of humans on the land, air, water and other living things.

Example: recycling and reusing.

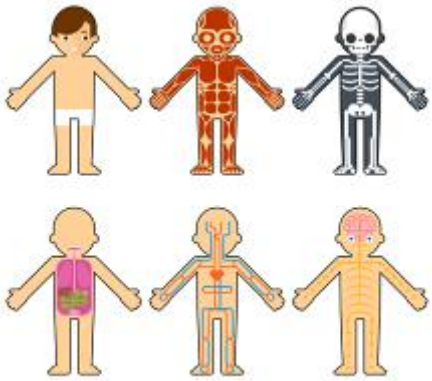
WHAT KIDS LEARN IN GRADE 2

Life sciences

Plants & animals

- Introduced in grade 1, students conduct experiments to see if plants need sunlight and water to grow.
- They create simple models to mimic how animals disperse seeds or pollinate plants.
- They study different habitats and the diversity of life in those habitats.
- They continue to learn about the life cycle of plants and animals. They start to study parts of animals in more detail.

Example: abdomen, thorax and head of an insect.



Human Body

Students learn about the human body and its systems:

- Skeletal
- Muscular
- Digestive
- Nervous

They also study how to take care of their bodies.

Experiments

Introduced in grade 1, students continue to learn about scientific methods in doing experiments, such as:

- Classification and establishing order
- Designing an experiment
- Predictions
- Conducting an experiment
- Observation and measurement
- Questioning
- Explaining data
- Representing data on graphs or in tables

WHAT KIDS LEARN IN GRADE 2

Social Skills

Teachers focus on helping grade 2 students work on the following social skills:

Acceptable behavior
At this age students have the ability to identify their feelings and what causes them, so teachers focus on helping students manage their emotions and how to behave appropriately.

Co-operation
Children at this stage are able to describe the relationships they have with others. They know what traits make a good friend and how to be a good friend.
Teacher work with students on:

- Using polite language in the classroom and on the playground
- Paying attention when others are speaking
- Taking turns and sharing with others

These skills are reinforced in group activities and projects.

Self-awareness
Students start to recognize areas where they are strong and where they are weak.
Teachers work with students to understand they can't be good at everything.
They help students identify areas where they need to focus more energy to reduce the student's frustration with schoolwork.

Responsibility
Students learn to take responsibility for their own actions.
Teachers help students understand that actions can have both positive and negative consequences.
They do this by spelling out the consequences in advance.
Teachers help students understand that failing to meet expectations will result in a consequence of some sort.

WHAT KIDS LEARN IN GRADE 3

Math Skills

In grade 3 math, kids work on the following skills:

Numbers and operations

Place value
Add & subtract to 1,000
Introduction to multiplication
Introduction to division
Multiply and divide within 100
Unknown whole number
Two-step word problems
Arithmetic patterns
Introduction to fractions
Fractions on a number line
Fractions as numbers

Measurement & data

Tell time in minutes
Time word problems
Mass & volume
Graphs & line plots
Area & perimeter

Geometry

Classify shapes
Partition shapes

Numbers and operations

Place Value

Students learn to round whole numbers to the nearest 10 or 100.

Add & subtract

Students fluently add and subtract within 1,000 using strategies based on:

Place value

Example: 231 + 21 is 2 hundreds, 3 tens + 2 tens, 1 ones + 1 ones = 252

Properties of operations

Example: 231

+ 21

252

They cover the relationship between addition and subtraction.

Example: addition and subtraction are opposites 252 – 21 = 231; 231 + 21 = 252

Introduction to multiplication

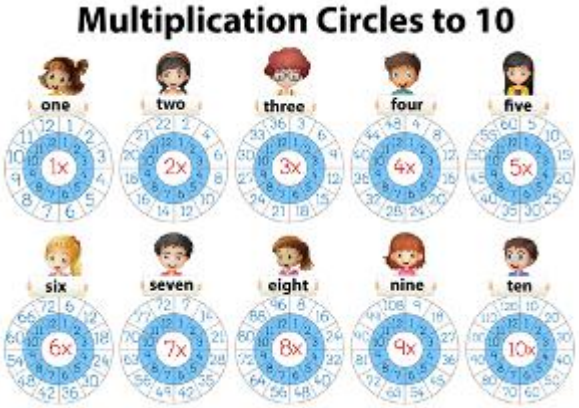
Students learn what it means to multiply numbers.

Example: 6 x 3 is the total number of objects in 6 groups where each group contains 3 objects.

Introduction to division

Students learn what it means to divide numbers.

Example: 6 ÷ 2 is the number from separating 6 into 2 equal groups.



WHAT KIDS LEARN IN GRADE 3

Numbers and operations

Multiply and divide within 100

- Students learn their times table 0 x 0 to 10 x 10 fluently.
- They understand the relationship between multiplication and division.

Example: knowing that 8 x 5 = 40, one knows 40 ÷ 5 = 8.

- They will also use multiplication and division within 100 to solve word problems, using drawings and equations to work out the answer.

Unknown whole number

Students work out the unknown whole number in a multiplication or division equation.

Example: 8 x ? = 40, 8 = ? ÷ 5

Two-step word problems

Students solve two-step word problems using the four operations (+ - x ÷).

Arithmetic patterns

Students identify arithmetic patterns and explain them.

Example: two times a number is always even, explain why 4 times a number can be decomposed into two equal addends.

Introduction to fractions

Students learn about fractions as the quantity formed by one part of a whole partitioned into equal parts.

Example: 1/4 is one quarter of a whole, where 4 quarters make up the whole.

Fractions on a number line

Students use number lines to understand fractions, where they define the interval 0 to 1 as the whole and partition that segment into equal parts to represent equal fractions.

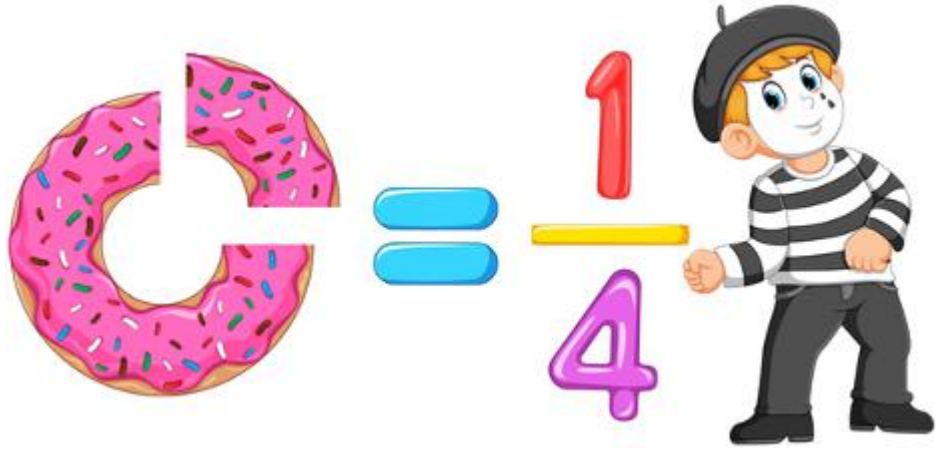
Fractions as numbers

Using visual models or number lines, students learn to understand that two fractions are equal if they are the same size or on the same point on the number line.

Example: 2/4 = 1/2

Students compare two simple fractions as larger than, less than or equal to.

Example: 2/3 > 1/3



WHAT KIDS LEARN IN GRADE 3

Measurement & data

Tell time
Students will tell and write time to the nearest minute. They will measure time intervals in minutes.

Time word problems
They solve word problems involving addition and subtraction of time intervals in minutes, often using a number line to solve the problem.

Mass & volume
Students will estimate and measure the mass of objects and volume of liquids. They will use metric standards: grams, kilograms and liters.
They solve one-step word problems involving mass and volume, using the four operations.
Example: the large sack of potatoes weighs 21 kg. The small sack of potatoes is 6 kg lighter. How much does the small sack of potatoes weigh?

Graphs & line plots
- Students draw picture graphs and bar graphs to represent a data set with several categories.
- They solve one- and two-step word problems using the information presented in the graph.
- They also measure data using rulers marked with halves and quarters of an inch. They show the data by making a line plot.

Area & perimeter
Students learn to measure the area and perimeter of shapes:
- Measuring areas by counting unit squares (square cm, square m, square in, square ft).
- Find the area of a rectangle with whole-number side lengths by multiplying side lengths.
- Solve real-world problems involving the perimeters of polygons (two-dimensional closed shapes).

Geometry

Classify shapes
Students use similarities and differences of geometric shapes to categorize and classify them.
Example: rhombuses, rectangles and squares all have four sides, also called quadrilaterals.

Partition shapes
Students learn to divide shapes into equal areas.
Example: partition a square into 4 equal parts, describe the area of each part as 1/4 of the shape.

WHAT KIDS LEARN IN GRADE 3

Reading & Writing Skills

In grade 3 reading and writing, kids work on the following skills:

Grammar
Nouns
Verbs
Adjectives & adverbs
Conjunctions
Sentences
Capitalization & punctuation

Phonics
Decoding words

Sight words
Read common words by sight

Reading comprehension
Fluency
Spoken & written English
Retell stories
Parts of a text
Compare and contrast texts

Writing
Opinion pieces
Informative/explanatory texts
Narrative stories
Research to gain knowledge

Vocabulary/Spelling
Unknown words
Context clues
Affixes
Root words
Literal and non-literal meaning
Real-life connections
Shades of meaning
Research
Spelling

Grammar

Nouns
- Students learn to form and use regular and irregular plural nouns.
- They use abstract nouns.

Example: childhood, peace

Adjectives & adverbs
Students work on comparative adjectives.
Example: slower, faster, happier
They also work on superlative adjectives.
Example: slowest, fastest, happiest

Verbs
- Students learn to form and use regular and irregular verbs.
- They form and use the simple verb tenses.

Example: I sit, I sat, I will sit.
- They are expected to understand that all parts of a sentence agree: if the noun is singular, the verb should be singular. If the noun is plural, the verb should be plural.

Example: John and Ben drive their cars to school. John drives his car to school.

Conjunctions
Students use coordinating conjunctions to combine two sentences.
Example: Randy needs a haircut. He does not have any money. (but)
Randy needs a haircut, but he does not have any money.
Students also work on subordinating conjunctions to create complex sentences.
*Example: **Before** you go to bed, brush your teeth.*
*It is cold outside **although** it is already summer.*

WHAT KIDS LEARN IN GRADE 3

Grammar

Sentences
Students identify and write simple, compound and complex sentences.
Example: There are six people here. – simple
It was time for bed, yet it was still light outside. – compound
Before the bell rings, the students lined up at the door.— complex

Capitalization & punctuation
- Students work on capitalizing titles, addresses, days and months, and proper nouns.
- They learn to use commas in addresses.
- They work on writing commas and quotation marks in dialogue.

Example: "I want to go on the swings," said Pilar.
- They focus on writing possessives.

Example: This is Jose's dog.

Phonics

Decoding words
- Students use grade-level phonics and word analysis skills to decode words.
- They learn to decode multisyllable words.
- They read grade-appropriate irregularly spelled words.

Sight words

Read common words by sight
Students learn to read 'high-frequency' words used in grade 3 reading by sight.
Example: your, today, myself, start, bring, light, better

WHAT KIDS LEARN IN GRADE 3

Vocabulary/spelling

Unknown words
Students learn the meaning of unknown grade-level words, multiple meaning words and phrases.

Context clues
Students use clues in sentences to work out the meaning of unfamiliar words.

Affixes
Students determine the meaning of words formed with prefixes and affixes.
Example: comfortable/uncomfortable, care/careless

Root words
Students use their understanding of a known root word to work out the meaning of unknown words with the same root.
Example: company, companion

Literal and non-literal meaning
Students distinguish the literal and non-literal meanings of words and phrases in a text.
Example: take steps, something is fishy, pain in the neck

Real-life connections
Students identify real-life connections between words and their use.
Example: describe pets that are fluffy and soft.

Shades of meaning
Students distinguish shades of meaning among related words that describe states of mind.
Example: knew, believed, suspected

Research
They use glossaries and dictionaries to learn the meaning of words.

Spelling

- Students continue to practice conventional spelling of sight words.
- They work on adding suffixes to base words.

Example: happiness, forgetful

- They work on spelling patterns in learning to spell words.

Example: word families, position-based spelling, syllable patterns, ending rules, meaningful word parts.

- They use a dictionary to check the spelling of words.

WHAT KIDS LEARN IN GRADE 3

Reading comprehension

Fluency

- Students read with sufficient accuracy and fluency to support comprehension.
- They read grade-level texts with purpose and understanding.

Parts of a text

Students refer to parts of stories, dramas or poems in terms of chapter, scene or stanza.
They describe how each successive part builds on earlier sections.

Spoken and written English

Students recognize the differences between spoken and written standard English.

Compare and contrast texts

Students compare and contrast the themes, settings and plots of stories written by the same author.

Questions

Students comfortably ask and answer questions to demonstrate their understanding of a text.

Retell stories

Students retell stories, including fables, folktales and myths from diverse cultures, with an understanding of:
Fiction:

- The central message.
- Lesson or moral of the story.
- The key details that convey that lesson or moral.
- The characters, including their traits, motivations or feelings, and how their actions contribute to the story.
- Distinguish their own points of view from that of the narrator or characters of a story.

Non-fiction:

- Main idea of a text.
- Describe the relationship between a series of historical events, scientific ideas or concepts.
- Use information gained from illustrations, such as maps or photographs.
- Distinguish their own point of view from that of the author or text.

WHAT KIDS LEARN IN GRADE 3

Writing

Opinion pieces

Students write opinion pieces on topics or texts, including:

- Introducing the topic or text
- Stating an opinion
- Providing reasons that support the opinion
- Writing a concluding statement

Informative/explanatory texts

Students write informative/explanatory texts with a focus on conveying ideas and information clearly, including:

- Introducing a topic and group related information together
- Developing the topic with facts, definitions and details
- Providing a concluding statement

Narrative stories

Students write stories to develop real or imagined experiences or events, using:

- Effective technique
- Descriptive details
- Clear sequence of events
- Dialogue between characters
- Descriptions of actions, thoughts and feelings
- A sense of closure

Research to gain knowledge

- With help from adults, students use technology to find information.
- Students conduct short research projects to build their knowledge about a topic – individually and in groups.
- Student recall information from experiences or gather information from print and digital resources, take brief notes and sort that information into a presentable format.

WHAT KIDS LEARN IN GRADE 3

Science Skills

In grade 3 science, kids work on the following skills:

Physical sciences
Motion
Electricity & magnetism

Earth sciences
Weather & climate

Life sciences
Plants & animals
Ecosystems
Heredity
Evolution
Human body

Experiments
Scientific methods

Physical sciences

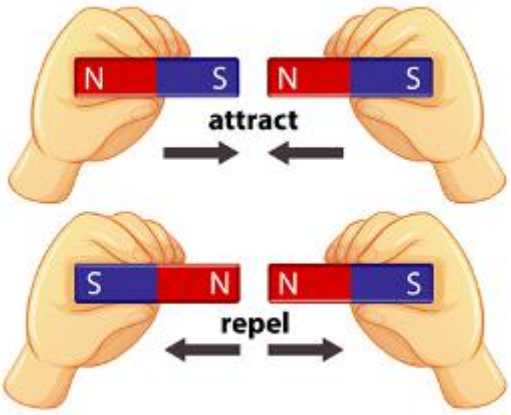
Motion

- Students investigate the effects of balanced and unbalanced forces on the motion of an object.

Example: pushing a ball to make it move creates an unbalanced force, pushing equal force on a box from both sides will produce no motion and a balanced force.

- They observe patterns in motion and predict future motion.

Example: a child swinging on a swing, a ball rolling back and forth in a bowl, children on a seesaw.



Electricity and magnetism

- Students determine the cause and effect relationships of electric interactions between two objects.

Examples: rubbing a balloon on their hair to cause an electrically charged balloon, the electric forces of a charged rod and pieces of paper

- Students determine the cause and effect relationship of magnetic interactions between objects.

Example: force between two permanent magnets, the force between an electromagnet and steel paperclips

- Students design a problem that can be solved with a magnet.

Example: construct a latch to keep a door shut using magnets

WHAT KIDS LEARN IN GRADE 3

Earth sciences

Weather & climate

- Students represent typical seasonal weather conditions with data in tables and graphical displays.

Example: average temperature, rain, wind direction in a season

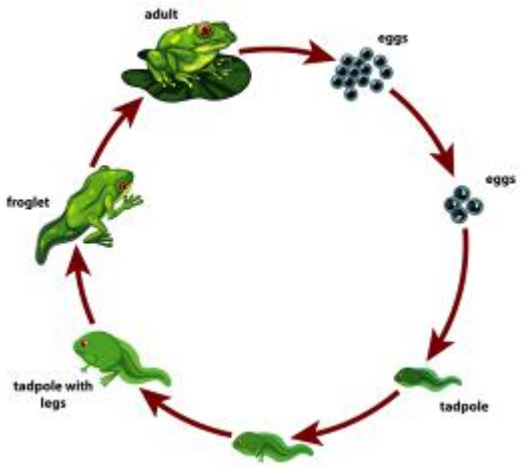
- They work on design solutions that reduces the impact of a weather-related hazard.

Life sciences

Plants and animals

Students develop models to describe that plants and animals have diverse life cycles, but have birth, growth, reproduction and death in common.

Example: butterflies vs. grasshoppers, hydroponics vs. soil planning of plants, butterfly or frog life cycle



Ecosystems

- Students construct arguments that some animals form groups to help members survive.

Example: mammals – dolphins, lions or elephants, birds – geese, penguins or flamingos

- Students use evidence to explain how variations among individuals of the same species will provide advantages in surviving, finding mates and reproducing.

Example: plants with larger thorns are less likely to be eaten by animals; animals with camouflage colors may be more likely to survive and leave offspring

- Students explore how some animals and plants survive well in a particular habitat, whereas other cannot survive.

Examples: how mammals with fur survive in cold climates, how camels survive in the desert

- Students consider how plants and animals may change when their environment changes.

Example: changes in land characteristics – water, temperature, availability of food

WHAT KIDS LEARN IN GRADE 3

Life sciences

Heredity

- Students will analyze and interpret data to prove that plants and animals have traits they inherit from their parents.
- They observe that variations on these traits exist in a group of similar animals or plants.

Example: sorting seashells, a focus on a mammal: giraffe, whale or dogs.

- They explore how animal and plant traits can be influenced by the environment.

Example: how normally tall plants are stunted by a lack of water, how an overfed dog that exercises little will become overweight.

Evolution

Students investigate fossils to prove that certain plants and animals lived in certain environments a very long time ago.

Examples: marine fossils found on land, tropical plant fossils found in the Arctic

Human Body

Continuing from grade 2, students learn about the human body and its systems:

- Skeletal
- Muscular
- Digestive
- Nervous

They also study how to eat properly and exercise to take care of our bodies.

Experiments

Students continue to learn about scientific methods in doing experiments, such as:

- Using the five senses to gather information
- Using tools to extend the senses
- Learning to ask questions that can be answered through investigation
- Planning and carrying out investigations
- Using measurement to make estimates or record data
- Making predictions and seeing if they occur as expected
- Basing conclusions on facts and observations
- Looking for commonalities and differences in grouping objects or events

WHAT KIDS LEARN IN GRADE 3

Social Skills

Teachers focus on helping grade 3 students work on the following social skills:

Respect

- Students learn to see both sides of a discussion or argument, and to respect others' opinions. Teachers help students to use respectful language when they disagree.

Example: I think lions are great to read about too, but I think for this project it would be better to study deer because there are so many different kinds.

- Teachers also focus on teaching students to compromise.

Responsibility

In grade 3, students have to take more responsibility and be more organized as their schoolwork increases. Teachers work with students to help them establish routines and discuss how best to organize their day.

Self-reliance

Students at this stage become more independent and will not want to tell on their friends or share the conflict they've had with adults.

Teachers talk with students about how best to resolve arguments.

The aim is to help students resolve their own problems – be it social or academic – to build their resilience.

Constructive criticism

Students learn to accept teacher and peer feedback more gracefully and to be willing to make suggested changes more willingly. They are also learning to express improvements their peers can make in a respectful way.

Logical thinking

Moving beyond grade 1 and 2 skills, students have the ability to see the bigger picture and plan out more complex activities.

Teachers work with students on more challenging work, such as long-term projects and multi-step math problems.

Students are encouraged to think in a more organized and logical fashion.

WHAT KIDS LEARN IN GRADE 4

Math Skills

In grade 4 math, kids work on the following skills:

Numbers and operations

Multi-digit whole numbers
Remainders
Multiplication as a comparison
Word problems
Factors
Breaking down fractions
Equivalent fractions
Adding and subtracting fractions
Numerators and denominators
Multiply fraction by whole number
Fractions as decimals
Compare fractions and decimals

Measurement & data

Relative sizes of units
Word problems
Line plots

Geometry

Area and perimeter
Lines and angles
Line of symmetry

Numbers and operations

Multi-digit whole numbers

- Students are now able to quickly and accurately add and subtract multi-digit whole numbers up to 1 million.
- They read and write multi-digit whole numbers using base-ten numerals, number names and expanded form.
- They use their place value understanding to round multi-digit numbers to any place.

Remainders

- Students multiply a whole number of up to four digits by a one-digit whole number, including problems with remainder.
- They multiply two two-digit numbers.
- Students divide a number of up to four digits by a one-digit number, including problems with remainders.
- They illustrate and explain the calculation by using equations, rectangular arrays and area models.

Multiplication as a comparison

Students now understand that a multiplication equation is interpreted as a comparison.
Example: 35 = 5 x 7 as a statement that 35 is 5 times 7 and 7 times 5.

Word problems

- Students solve multiplication and division word problems, using drawing and equations with a symbol for the unknown number.
- They solve multistep word problems with whole numbers using the four operations (addition, subtraction, multiplication, division), including problems with remainders.

Factors

- Students learn to find all factor pairs for a whole number in the range 1 – 100. In doing so, they recognize that a whole number is a multiple of each of its factors.

Example: 3 and 4 are factors of 12.

- They understand a prime number as having only one factor pair: one and itself.

WHAT KIDS LEARN IN GRADE 4

Numbers and operations

Breaking down fractions
Students break down fractions into smaller fractions that have the same denominator (bottom number).
Example: 3/4 = 1/4 + 1/4 + 1/4

Equivalent fractions
Using visual fraction models, such as number lines and fraction bars, students learn how fractions can be equal even when the number and size of the parts are different.

Adding and subtracting fractions
Students learn to add and subtract fractions with the same denominator (bottom number).
Example: 5/8 + 2/8 = 7/8; 7/8 – 5/8 = 2/8
Students also add and subtract mixed numbers with the same denominator.
Example: 1 1/6 + 2 4/6 = 3 5/6
They solve word problems involving addition and subtraction of fractions, using visual fraction models and equations to represent the problem.

Numerators and denominators
Students learn to compare two fractions with:

- Different numerators (top numbers)
- Different denominators (bottom numbers).
- They record the results with greater than (>), equal to (=) and less than (<)

Example: comparing 3/8 and 4/16. First understand that 4/16 is the same as 2/8. So, 3/8 > 2/8.

Multiply fraction by whole number
Students learn to multiply fractions by a whole number.
Example 5 x 1/4 = 5/4
They solve word problems involving multiplication of a fraction by a whole number.

Fractions as decimals
Students write fractions with denominators of 10 and 100 as decimals.
Example: 4/10 as 0.4, 0.90 as 9/100.

Compare fractions and decimals
Students learn to compare numbers written as fractions and numbers written as decimals, using greater than (>), equal to (=) and less than (<).

WHAT KIDS LEARN IN GRADE 4

Measurement & data

Relative sizes of measurement units
Students know the measurement units within one system of units and express measurements in larger or smaller units relative to each unit.
Example: 1 foot is 12 times as long as I inch.

Word problems
Students use the four operations to solve word problems involving:

- Distance
- Intervals of time
- Liquid volumes
- Masses of objects
- Money

Line plots
Students make a line plot to display a data set of measurements in fractions of a unit.
Example: 1/2, 1/4, 1/8
They solve addition and subtraction of fractions by using information presented in line plots.
Example: represent the length between the longest and the shortest insect in a collection.

Geometry

Area and Perimeter
Students calculate the area and perimeter of rectangles.
For example: In our backyard we have an area that is 10 yards by 15 yards that we want to cover in grass. The grass costs $2 per yard. How much will the new grass cost to cover the whole area?

Lines and angles
Students draw and identify different types of lines and angles, including:

- Points and lines
- Line segments
- Rays
- Angles: right, acute, obtuse
- Perpendicular lines
- Parallel lines

Line of symmetry
Students learn to recognize a line of symmetry: a line across a two-dimensional figure such that the figure can be folded along the line into identical matching parts. They work on the most common symmetrical shapes: circles, squares, rectangles, ovals, triangles, hexagons and octagons folded in half.

WHAT KIDS LEARN IN GRADE 4

Reading & Writing Skills

In grade 4 reading and writing, kids work on the following skills:

Grammar
Pronouns & adverbs
Verb tenses
Adjectives
Prepositions & prepositional phrases
Sentences
Capitalization & punctuation

Writing
Opinion pieces
Informative/explanatory texts
Narrative stories
Type page of writing

Reading comprehension
Fluency
Spoken & written English
Character, setting & event
Differences between texts
Compare & contrast
Visual information
Give oral reports
Participate in conversations
Paraphrase information

Research & inquiry
Short research projects
Research to gain knowledge

Vocabulary/Spelling
Commonly confused words
Unknown & multiple meaning words
Context clues
Affixes & roots
Reference material
Figurative language
Similes & metaphors
Idioms, adages & proverbs
Spelling grade-appropriate words

Phonics
Decoding words
Multisyllabic words

Grammar

Pronouns & adverbs
Students work on:
- relative pronouns: who, whose, whom, which, that
- relative adverbs: where, when, why

Verb tenses
Students form and use progressive verb tenses.
Example: I was walking; I am walking; I will be walking

Adjectives
Students learn to order adjectives within sentences (quantity, opinion, size, physical quality, shape, age, color, origin, material, type, purpose).
Example: a small blue bag instead of a blue small bag

Prepositions & prepositional phrases
Students work on forming and using prepositions and prepositional phrases.
*Example: She wants to visit her friend **on Friday**. There is a party **for** her birthday.*

WHAT KIDS LEARN IN GRADE 4

Grammar

Sentences

By now students produce complete sentences.

They learn to recognize and correct fragments and run-on sentences.

Examples: Runs and plays in the yard all day. – fragment

Our dog runs and plays in the yard all day.

The girls play football the boys play soccer. – run-on sentence

The girls play football, and the boys play soccer.

Capitalization and punctuation

- Students demonstrate a good understanding of standard English capitalization and punctuation.
- They know how to use correct capitalization.
- They use commas and quotation marks to mark dialogue and quotations in texts.

Example: "You have all done an outstanding job," the teacher said.

- They learn to use a comma before a coordinating conjunction in a compound sentence.

Example: He ran out of money, so he had to stop buying candy.

- They learn to use punctuation for effect.

Example: exclamation marks, commas, parentheses, dashes and hyphens

Phonics

Decoding words

Students know and apply grade-level phonics and word analysis skills to decode words.

Multisyllabic words

Students now use their understanding of how letters sound, syllabification and root/affix knowledge to accurately read multisyllabic words.

Example: pla – ne – ta – ri – um: planetarium

WHAT KIDS LEARN IN GRADE 4

Vocabulary/spelling

Commonly confused words
Students learn to correctly use frequently confused words.
Example: to, too, two; there, their; its, it's

Unknown & multiple meaning words
Using a range of strategies, students learn to determine the meaning of unknown words and multiple meaning words and phrases.
*Example: I brought back a beautiful **fan** from my trip to Japan. I am a big **fan** of tennis.*

Context clues
Students use context in a sentence or text as clues to work out the meaning of an word or a phrase.
*Example: The goal of the United Nations is to **maintain** international peace and security.*
Maintain means to continue, keep in existence.

Affixes & roots
Students use grade-appropriate prefixes, suffixes and root words as clues to the meaning of a word.
Example: telegram, telephone, television – tele means over a long distance.

Reference material
Students learn to be comfortable with looking up words in dictionaries, glossaries and thesauruses.

Spelling: grade-appropriate words
Students spell grade-appropriate words correctly and consult references as needed.
Example: garbage, beach, mobile, porridge

Figurative language
Students learn about figurative language, relationships between words, and the nuances of word meanings.
Example: The tree's limbs groaned in the strong wind.

Similes & metaphors
Students learn to explain the meaning of similes.
Example: My mom is as busy as a bee.
They also learn to explain the meaning of simple metaphors.
Example: The ants soldiered on to steal our dessert.

Idioms, adages & proverbs
Students learn to recognize and explain the meaning of common:
Idioms
Example: After this long game, I've run out of steam.
Adages
Example: The pen is mightier than the sword.
Proverb
Example: An apple a day keeps the doctor away.

Synonyms and antonyms
Students learn to relate similar words - synonyms,
Example: even - level
and opposite words - antonyms.
Example: admit - deny

WHAT KIDS LEARN IN GRADE 4

Reading comprehension

Fluency
Students read with sufficient accuracy and fluency:
- grade-level fiction and non-fiction
- prose, stories
- poetry.

They use context to confirm or self-correct their understanding of words.

Main idea & details
- Students learn to work out the theme of a story, drama or poem from details in the text, and the main idea of an Information or instructional text. They learn to summarize the text.
- They will refer to details and examples in a text when explaining what the text is about, both fiction and non-fiction.

Character, setting & event
- Students now describe in depth a character, setting or event in a story or drama. They draw on specific details in a text.

For example: a character's thoughts, words or actions.
- In non-fiction texts, they explain the events, procedures, ideas or concepts in historical, scientific and technical texts. They learn to explain what happened and why.

Differences between texts
Students learn to explain the major differences between:
- Poems: verse, rhythm, meter
- Prose: character, setting, plot, point of view, mood
- Drama: cast of characters, settings, descriptions, dialogue, stage directions
- Non-fiction: the overall structure: chronology, comparison, cause/effect, problem/solution of events, ideas or information in a text

Compare & contrast
Students spend time to compare and contrast:
- The point of view from which different stories are narrated. They learn about the difference between first-person and third-person narrations.
- The treatment of similar themes and topics

Example: good vs. evil
- Patterns of events in stories, myths and folklore/fables.

Example: the quest in a story
- The firsthand and secondhand account of the same event or topic of a non-fiction text.

Visual information
Students learn to interpret visual information and explain how that information contributes to the text.
Examples: charts, graphs, diagrams, timelines, animations

Give oral reports
Students report orally on a topic to show understanding, using well-chosen and well-organized facts and details.

Participate in conversations
Students participate in conversations about topics and texts being studied, listening carefully to the ideas of others and asking and answering questions in order to gather more information or deepen their understanding of the topic.

Paraphrase information
Students work on paraphrasing information from media presentations or books read aloud.

WHAT KIDS LEARN IN GRADE 4

Writing

Opinion pieces

Students write opinion pieces on topics/texts, including:

- Introducing the topic or text, stating an opinion and creating an organizational structure of grouped ideas.
- Providing reasons that support the opinion by facts and details.
- Linking the opinion and reasons using words and phrases..

Example: for instance, in order to, in addition

- Writing a concluding statement to the opinion presented.

Informative/explanatory texts

Students write informative/explanatory texts with a focus on conveying ideas and information clearly, Including:

- Introducing a topic and group related information in paragraphs and section, including headings, illustrations and multimedia in aiding comprehension
- Developing the topic with facts, definitions, concrete details, quotations and examples.
- Linking ideas using words and phrases.

Examples: another, for example, also, because

- Using precise language and domain-specific vocabulary.
- Providing a concluding statement related to the information presented.

Narrative stories

Students write stories to develop real or imagined experiences or events, using:

- Effective technique
- Descriptive details
- A situation, introducing a narrator and/or characters
- Clear sequence of events with transitional words and phrases to manage the sequence of events
- Dialogue between characters
- Descriptions of actions, thoughts and feelings
- Concrete words, phrases and sensory detail to convey experiences and events
- Provide a conclusion that follows the narrated experiences or events.

Type page of writing

Students type at least one page of writing in a single sitting.

Research & inquiry

Short research projects

Students independently conduct short research projects to investigate and become knowledgeable about a topic.
They take notes and sort information into categories and provide a list of sources.

Research to gain knowledge

With help from adults, students use technology to find information.
Students conduct short research projects to build their knowledge about a topic – individually and in groups.

WHAT KIDS LEARN IN GRADE 4

Science Skills

In grade 4 science, kids work on the following skills:

Physical sciences
Energy
Waves

Life sciences
Internal & external structures of plants & animals
Senses

Earth sciences
Rock layers
Weathering & erosion
Patterns of Earth's features
Natural disasters & humans
Earth & human activity

Experiments
Scientific methods

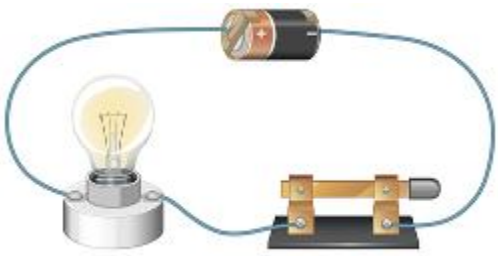
Physical sciences

Energy

- Students explore and learn to explain how the speed of an object relates to the energy of that object.
- They learn that energy can be transferred from place to place by sound, light, heat and electric circuits. They design, test and refine a device that converts energy from one form to another.

Example: a device that converts electrical energy into motion energy of a vehicle, or a passive solar heater that coverts light into heat.

- They work on predicting outcomes in changes in energy when objects collide.
- They learn that energy and fuels come from natural resources and that their uses affect the environment. They explore renewable energy.



Waves

- Students develop a model of waves to describe patterns: amplitude and length. As part of that model they learn that waves can cause objects to move.
- Students also work on models that describe that light reflecting from objects and then enters the eye allows those objects to be seen.
- They look at and compare solutions to use patterns to transfer information.

Example: drums sending coded information through sound waves and Morse code.

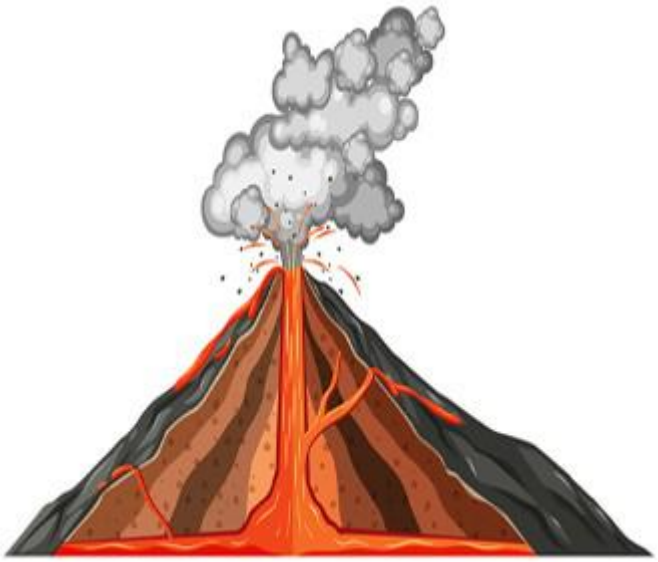
WHAT KIDS LEARN IN GRADE 4

Earth sciences

Rock layers
Students spend time exploring rock formations and fossils in rock layers. They learn these layers show changes in a landscape over time.
Example: the evidence of marine shell fossils above rock layers with plant fossils indicate a change from water to land over time, or a canyon with different rock layers in the walls indicate a river cut through the rock.

Weathering and erosion
They make observations and take measurements to provide evidence of the effects of weathering or rates of erosion by water, wind or vegetation.
Example: the angle of slope in the movement of water downhill, speed of wind, cycles of freezing and thawing of water.

Patterns of Earth's features
Students analyze and interpret data from maps to describe Earth's features.
Example: topographic maps of Earth's land and ocean floor, maps of mountains, continental boundaries, or volcanoes.



Natural disasters & humans
Students explore and compare multiple solutions to reduce the impacts of natural disasters on humans.
Example: designing earthquake-resistant building or Improving the monitoring of volcanic activity.

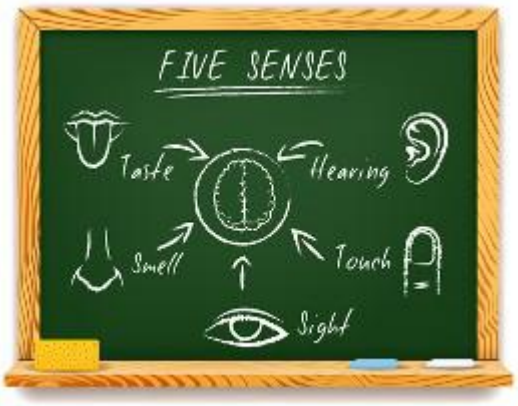
Earth & human activity
Students learn about energy and fuel derived from natural resources and how their uses affect the environment.
Example: loss of habitat due to dams or surface mining, pollution from burning fossil fuels.
Students explore renewable energy resources.
Example: wind energy, hydropower and sunlight.

WHAT KIDS LEARN IN GRADE 4

Life sciences

Internal & external structures of plants & animals
Students learn about the internal and external structures of plants and animals, including humans, that function to support their survival, growth, behavior and reproduction.
Example: thorns, stems, colored petals, heart, stomach, lung, brain and skin.

Senses
Students use a model, and construct an argument, to describe that animals receive different types of information through their senses, that they process that information in their brain and respond to the information in different ways.



Experiments

Students continue to learn about scientific methods in doing experiments, such as:

- Using the five senses to gather information
- Using tools to extend the senses
- Learning to ask questions that can be answered through investigation
- Planning and carrying out investigations
- Using measurement to make estimates or record data

WHAT KIDS LEARN IN GRADE 4

Social Skills

Teachers focus on helping grade 4 students work on the following social skills:

Accountability

Students juggle daily assignments with longer-term projects in grade 4. They learn to take accountability for the consequences of forgetting to complete, and misplace, work. Teachers help them work through these times and speak with parents about letting their kids make mistakes.

Example: parents are encouraged to give their kids a couple of reminders to bring that permission slip, but let them take accountability for bringing it to school.

Perspective

Taking more responsibility can bring on new anxieties in some students. Teachers work with students to gain perspective on their academic progress. They teach students that it is alright to make mistakes, as long as you learn from them. Students learn to take their academic year in stride.

Social interactions

- Students continue to learn about making friends and dealing with conflict. In particular, teachers coach students on how to resolve arguments and fights. Peer pressure and bullying are common topics discussed in the classroom.
- Students are now able to identify the characteristics of a good friend. Teachers work to reinforce those characteristics with students. As such, students start to recognize that friendship has different levels and that, at this age, these levels are frequently in flux.

WHAT KIDS LEARN IN GRADE 5

Math Skills

In grade 5 math, kids work on the following skills:

Numbers and operations
Place value system
Multi-digit whole numbers
Add & subtract with unlike denominators
Multiply fractions, fractions with whole numbers
Divide fractions by whole numbers
Compare decimals
Decimals to the hundredths
Word problems
Exponents
Numerical expressions

Measurement & data
Convert units
Line plots

Geometry
Coordinate plane
Categorize two-dimensional figures
Volume

Numbers and operations

Place value system
Students will now understand the place value system:

- That in a multi-digit number, a digit placed to the right represents 10 times as much, and 1/10 when placed to the left.
- That multiplying a number by powers of 10 is represented in the number of zeros of the product.
- That a decimal is multiplied or divided by power of 10 is represented in the placement of the decimal point.

Students can read, write and compare decimals to thousandths.
Example: 347.392 = 3 × 100 + 4 × 10 + 7 × 1 + 3 × (1/10) + 9 × (1/100) + 2 × (1/1000).
Students use place value understanding to round decimals to any place.

Multi-digit whole numbers
Students quickly and accurately, multiply multi-digit whole numbers.
They divide whole numbers (up to four digits) by two-digit numbers. They explain and illustrate how they solved the problem using equations, rectangular arrays and area models.
Example: 4,824 ÷ 12 = 402
They add, subtract, multiply and divide decimals to hundredths. Again, they explain and illustrate how they solved the problem.

WHAT KIDS LEARN IN GRADE 5

Numbers and operations

Add & subtract fractions with unlike denominators
Students learn to add and subtract fractions with unlike denominators, including mixed numbers.
For example: 2/3 + 5/4 = 8/12 + 15/12 = 23/12

Multiply fractions, fractions with whole numbers
Students learn to multiply fractions, and a whole number by a fraction.
Example: 2/3 × 4/5 = 8/15

Divide fractions by whole numbers
Students learn to divide fractions by whole numbers.
Example: (1/3) ÷ 4 = 1/12 because (1/12) × 4 = 1/3.

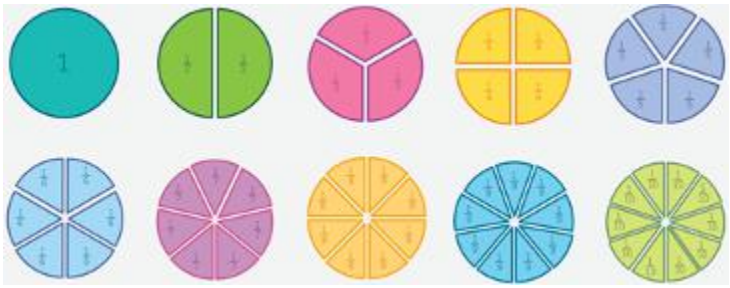
Compare decimals
Students read, write, and compare decimals to the thousandths place, using the symbols > (greater than), and < (less than).
Example: read this decimal number: 23.002; write two and sixty-two thousandths as a decimal number; which sign makes this statement true: 5.389 _?_ 5.420

Decimals to the hundredths
Students add, subtract, multiply, and divide decimals, to the hundredths.

Word problems
Students solve word problems involving the addition and subtraction of fractions with different denominators (bottom numbers), by converting them to fractions that have the same denominator, called a common denominator.
Example: The tallest girl in the fifth-grade class is 51 7⁄8 inches tall. The tallest boy in the fifth-grade class is 49 1⁄2 inches tall. What is the difference in their heights?
They solve word problems involving division of whole numbers leading to answers in fractions or mixed numbers.
Example: If 9 people want to share a 50-pound sack of rice equally by weight, how many pounds of rice should each person get?

Exponents
Students learn about exponents.
Example: the '2' in 10^2 indicates how many times to multiply the number by itself. 10^2 can be read as "10 to the second power" or "10 to the power of 2" or "10 squared," and means 10 x 10

Numerical expressions
Students learn to write and use parentheses in numerical expressions, and to evaluate expressions with these symbols.
Example: express the calculation "add 8 and 7, then multiply by 2" as 2 × (8 + 7).



WHAT KIDS LEARN IN GRADE 5

Measurement & data

Convert units
Students convert among different-sized standard measurement units.
Example: 5 cm = 0.05 m
They use these conversions in solving multi-step, real world problems.
Example: I have 60 cm of thread. I need seven times as much thread to complete a project. How many more meters of thread do I need?

Line plots
Students make line plots to display measurements in fractions of a unit (1/2, 1/4, 1/8).
They use operation to solve problems involving information presented in line plots.
Example: given different measurements of liquid in identical beakers, find the amount of liquid each beaker would contain if the total amount in all the beakers were redistributed equally.

Geometry

Coordinate plane
Students learn to use a pair of perpendicular number lines (axes) to define a coordinate system, where the intersecting lines start at 0. They then locate ordered pairs of numbers, called coordinates, along the x-axis and y-axis.
They represent real world and mathematical problems by graphing points in the first quadrant of the coordinate plane.

Categorize two-dimensional figures
Students now understand that attributes belonging to a category of two-dimensional figures also belong to all sub-categories of that category.
Example: all rectangles have four right angles and squares are rectangles, so all squares have four right angles.

Volume
Students learn to recognize volume as solid figures and understand the concepts of volume measurement:

- A cube with side length 1 unit has "one cubic unit" of volume
- Cubic units are measured by unit cubes

Example: cubic cm, cubic in, cubic ft
Students solve real world and mathematical problems involving volume, using addition and multiplication.
They learn to solve the volume of prisms.
Students apply the formula: $V = l \times w \times h$ and $V = b \times h$ for rectangular prisms to find volumes of right rectangular prisms with whole-number edge lengths.

WHAT KIDS LEARN IN GRADE 5

Reading & Writing Skills

In grade 5 reading and writing, kids work on the following skills:

Grammar
Conjunctions, prepositions & interjections
Verb tenses
Punctuation to separate items
Titles of work
Splices, fragments & run-on sentences
Sentence structure
Improve sentences

Reading comprehension
Fluency
Key ideas & details
Structure

Writing
Opinion pieces
Informative/explanatory texts
Narrative stories
Type page of writing

Research & inquiry
Research using several sources

Vocabulary/Spelling
Multiple-meaning words & phrases
Context clues
Affixes
Figurative language & nuances
Idioms, adages & proverbs
Synonyms, antonyms, homographs
Domain-specific words & phrases
Spelling grade-appropriate words

Phonics
Multisyllabic words

Grammar

Conjunctions, prepositions & interjections
Students learn to command the function of conjunctions, prepositions and interjections in sentences.
They work on identifying and writing prepositions and prepositional phrases.
*Example: One day we decided to go **to** the park **with** my dog.*
They identify and write interjections in sentences.
*Example: **Sorry**, I cannot attend your birthday party.*
They work on coordinating, correlative and coordinating conjunctions and learn to tell them apart.
Examples:
*The chair is broken, **so** we tried to fix it. – coordinating*
*The car works **after** you put gasoline in it. - subordinating*
*We cannot decide **whether** we should go to France **or** Italy. – correlative*

Verb tenses
Students form and use the perfect verb tenses.
Example: I had walked, I have walked, I will have walked
They use verb tense correctly in sentences about time, sequences, states and conditions.
*Example: A sentence describing an action that happened in the past: Yesterday, Bob **went** to the store and **bought** a candy bar.*
They correct verb usage and tenses in sentences.
*Example: My coach **thinked** we might win the game – My coach **thought** we might win the game.*

WHAT KIDS LEARN IN GRADE 5

Grammar

Punctuation to separate items

Students use commas, semi-colons and colons to separate items.

Example: When I woke up, I ate breakfast, brushed my teeth, and packed my lunch.

They learn to use a comma to separate an introductory element to a sentence.

Example: Glancing at the television, she saw the news headline about the forest fire.

They use a comma to set off the words yes and no.

Example: No, I don't have his phone number.

They use commas to indicate direct address and to set off a question tag.

Examples:

Mr. Howard, please stop by the office today. – direct address

This is your dog, isn't it? – questions tag

Titles of work

Students learn to use underlining, quotation marks or italics to indicate titles of works.

Splices, fragments and run-on sentences

Students learn to correct comma splices, fragments and run-on sentences.

Examples:

We won the game, we lost the tournament. – comma splice

We won the game, but we lost the tournament.

The teacher with the brown hair. – fragment

The teacher with the brown hair teaches math in the mornings.

He went to the store he bought some beans. – run-on sentence

He went to the store, and he bought some beans.

WHAT KIDS LEARN IN GRADE 5

Grammar

Sentence structure
Students learn to identify the subject and predicate of sentences.
Example: My brother and sister [subject] love to eat tacos every Tuesday [predicate].
Students identify simple, compound and complex sentences.
Example:
My family visits Montana.– simple
My parents ride horses, and I go hiking. – compound
I love to go on the trip because I think Montana is a beautiful place. - complex
Students learn to identify direct and indirect objects.
Example: She told my dad [indirect] the truth [direct].

Improve sentences
Students add details, combine and reduce sentences for meaning, interest and style.
They learn to combine thoughts into a well-written paragraph.

Vocabulary/spelling

Multiple-meaning words and phrases
Students work on grade-level multiple meaning words and phrases, and use a variety of strategies to work out their meaning in texts.

Context clues
Students use cause and effect relationships, and comparisons in texts as clues to the meaning of a word.

Affixes
Students work on grade-level Greek and Latin prefixes and suffixes, using root words as clues to the meaning of a word.
Example: photograph, photosynthesis

Figurative language and nuances
Students work on metaphors, similes, personification, hyperbole and symbolism to amplify their language and writing skills.

Idioms, adages and proverbs
Students recognize and explain the meaning of common idioms, adages and proverbs.

Synonyms, antonyms, homographs
Students use the relationship between particular words (synonyms, antonyms, homographs) to better understand each word.

WHAT KIDS LEARN IN GRADE 5

Vocabulary/spelling

Domain-specific words and phrases
Students acquire and use accurately grade-level domain-specific words and phrases to signal contrast, addition and other logical relationships.
Example: however, although, nevertheless, similarly

Spelling grade-appropriate words
Students spell grade-appropriate words correctly and consult references as needed.
Example: finance, purpose, character, musical

Phonics

Multisyllabic words
Students use their combined knowledge of letter-sound correspondence, syllabification and morphology (roots and affixes) to accurately read multisyllabic words.
Example: quadrilateral, hippopotamus

Reading comprehension

Fluency
Students read grade-level informational texts, prose and poetry with purpose, understanding, appropriate rate and expression.
They use context to confirm or self-correct word recognition and pronunciation.

Structure
Students learn to explain how a series of chapters, scenes or stanzas fit together into the overall structure of a story, drama or poem.
Students describe how a narrator's point of view influences how events are described.
They explain how an author uses reason and evidence to support particular points in an informational text. They identify which reasons and evidence support which points.

Key ideas and details
Fiction
Students quote accurately from a text when explaining what it means.
Students determine the theme of a story, drama or poem from details in the text, including:

- How characters respond to challenges
- How the narrator reflects on a topic
- Summarizing the text

Students compare and contrast two or more characters, settings or events in a story or drama, using specific details in their descriptions.
Non-fiction
Students determine two or more main ideas of an informational text. They explain how the ideas are supported by key details, and they summarize the text.
Students explain the relationships and interactions between two or more individuals, events, ideas or concepts in a historical, scientific or technical text.
They compare and contrast the overall structure (chronology, comparison, cause/effect, problem/solution) of events, ideas, concepts or information in two or more texts.

WHAT KIDS LEARN IN GRADE 5

Writing

Opinion pieces

Students write opinion pieces on topics and texts, supporting a point of view with reasons and information as follows:

- They introduce a topic or text clearly, state an opinion, and create an organizational structure in which ideas are logically grouped.
- They order the reasons in a logical order and support them with facts and details.
- They link opinions and reasons using linking words and phrases.

Examples: consequently, specifically

- They provide a concluding statement related to the opinion presented.

Narrative pieces

Students write narrative pieces to develop real or imagined experiences or events, as follows:

- They use effective technique, descriptive details and a clear sequence of events that unfolds naturally.
- They establish a situation and introduce a narrator and characters to orient the reader.
- They use narrative techniques, such as dialogue, description and pacing, to develop experiences, events or situations.
- They use a variety of transitional words and phrases to manage the sequence of events.
- They provide a conclusion that follows from the narrated experiences or events.

Informative/explanatory pieces

Students write informative/explanatory texts to convey ideas clearly, as follows:

- They introduce a topic clearly, provide a general observation and focus.
- They group related information logically to include heading, illustrations and multimedia.
- They develop the topics with facts, definitions, concrete details, quotations and examples related to the topic.
- They link ideas within and across categories of information using linking words and phrases.

Example: in contrast, especially

- They use precise language and domain-specific vocabulary to explain a topic.
- They provide a concluding statement on the information or explanation presented.

Research & inquiry

Research using several sources

In their writing pursuits, students conduct short research projects using several sources to investigate different aspects of a topic.

They draw evidence from literary and informational texts to support their analysis and reflection.

WHAT KIDS LEARN IN GRADE 5

Science Skills

In grade 5 science, kids work on the following skills:

Physical sciences
Matter

Life sciences
Energy

Earth sciences
Stars and the solar system
Earth's systems
Earth and human activity

Experiments
Scientific methods

Physical sciences

Matter

- Students develop a model to describe that matter is made of particles that are too small to be seen.

Examples: adding air to expand a ball, compress air in a syringe, dissolving sugar in water

- Students learn that regardless of the changes that occur when heating, cooling or mixing substances, the total weight of matter is conserved. They learn this by measuring and graphing these processes.
- Students observe and make measurements to identify materials based on their properties.
- They conduct an investigation to determine the results of mixing two or more substances.

Examples: reflectivity, electrical conductivity, thermal conductivity, response to magnetic forces, solubility

WHAT KIDS LEARN IN GRADE 5

Earth sciences

Stars and the solar system

- Students are asked to present an argument that the gravitational force exerted by Earth on objects is directed down.
- They also have to show the differences in the brightness of the sun compared to other stars is due to their relative distances from Earth.
- Students represent data in graphical displays of the daily changes in length and direction of shadows, day and night, as well as the seasonal appearance of some stars in the night sky.

Examples: the positions and motion of Earth with respect to the sun, stars that are visible only in particular months

Earth's systems

Students develop a model to describe the ways the geosphere, biosphere, hydrosphere and/or atmosphere interact.

Examples: the influence of the ocean on ecosystems, the influence of the atmosphere on landforms, the influence of mountain ranges on winds and clouds in the atmosphere

Students are asked to describe and graph the amounts of salt water and fresh water in various reservoirs. As part of the research they learn to provide evidence about the distribution of water on Earth.

Examples: oceans, lakes, rivers, glaciers, ground water and polar ice caps

Earth and human activity

Students obtain and combine information about the ways communities use science ideas to protect the Earth's resources and environment.

WHAT KIDS LEARN IN GRADE 5

Life sciences

Energy

- Students use models to describe the energy in animals' food was once energy from the sun.
- Students support the argument that plants get the materials they need for growth chiefly from air and water. The emphasis is that plant matter comes from mostly air and water, not from the soil.
- Students develop a model to describe the movement of matter among plants, animals, decomposers and the environment.

Examples: organisms, ecosystem and the Earth

Experiments

Students continue to learn about scientific methods in doing experiments, such as:

- Using the five senses to gather information
- Using tools to extend the senses
- Learning to ask questions that can be answered through investigation
- Planning and carrying out investigations
- Using measurement to make estimates or record data
- Making predictions and seeing if they occur as expected
- Basing conclusions on facts and observations
- Looking for commonalities and differences in grouping objects or events

WHAT KIDS LEARN IN GRADE 5

Social Skills

Teachers focus on helping grade 5 students work on the following social skills:

Perseverance
Students deal with minor setbacks at school. Teachers work with students to persevere and not give up easily. Perseverance, sometimes called grit, has proven to had successful impact on students' academic performance and, later, professional success.
Example: teachers will ask students to bring up times when they struggled and discuss with them how they resolved or overcame that struggle.

Active listening
By this age, most students have learned to stay quiet whilst others are speaking in the classroom. In grade 5, teachers work with them on being active listeners.
Example: teachers do this in role play. One student speaks or presents on a topic, and the teacher will fidget and not make eye contact with the student. Afterwards, the teacher will ask them to describe the teacher's body language and how that made the student feel. Later, the teacher will model what active listening looks like.

Resolving conflict
At this stage, kids have more sophisticated friendships. Teachers work with students on how to approach certain conversations, particularly those that involve providing feedback or addressing an issue.
Example: one approach teachers work on is sandwiching: providing the feedback in between a compliment and a positive conclusion. "I value our friendship and you're my friend. The other day you yelled at me on the playground and that made me sad. I really want to keep being your friend, so next time, please don't yell at me. Just talk to me about what bothers you so that we can resolve it together."

Peer pressure
Students in grade 5 will face peer pressure at one time or another. Teachers discuss negative pressure and work with students on how they can figure out ways to stand up for themselves the next time students find themselves in a negative peer interaction.

ACTIVITIES

What follows are activities that you can do with your child to help build the skills, attitudes and behaviors needed for school success. There is no one right way to do the activities. You should make changes to suit your child.

We provide some age guidelines with each activity; however, children do not always learn the same things at the same rate. Use the age levels as guidelines, not as hard and fast rules.

CAN YOU TOP THIS? (AGES 4 – 7)

Learning to take turns helps your child build spoken language skills and learn to work with others.

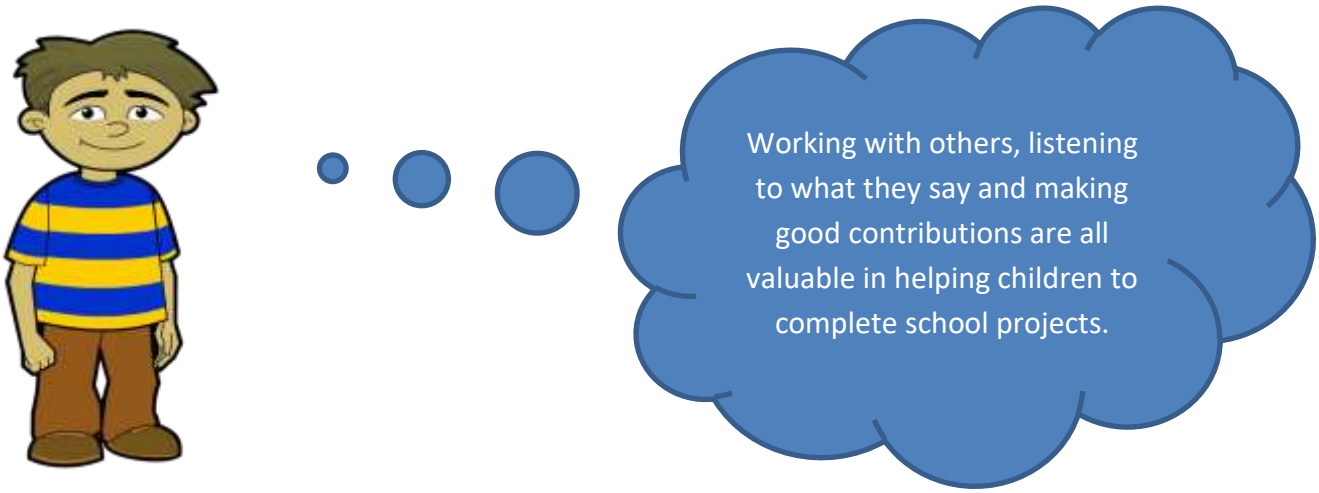
WHAT YOU NEED:

Nothing!

WHAT TO DO:

With your child, make up a story for the two of you to tell together, taking turns saying one sentence at a time.

- Begin by deciding on a topic, such as *pirates*.
- Say the first sentence: "Once upon a time a pirate lived in on a huge ship."
- Continue taking turns with your child making up and telling parts of the story until it comes to a natural conclusion – hopefully after some funny and imaginative twists and turns.



LISTEN! (AGES 4 – 7)

Listening to and giving directions helps your child sharpen listening and speaking skills.

WHAT YOU NEED:

any small object, such as a ball or a photograph, and
some objects that can make noise, such as keys, water glasses, spoons and decks of cards.

WHAT TO DO:

- Hide a small object. Give your child directions to find it such as: "Take five steps straight ahead. Turn right. Keep the lamp to your left. Bend down and look to the right." Next, have your child hide the object and give you directions to find it.

- Have your child close his eyes. Use something to make a sound, such as rattling your keys, tapping a spoon against a glass or riffling through a deck of cards. Ask your child to guess what's making the sound.

- Clap your hands to tap out a rhythm. Have your child listen and then clap that same rhythm back to you. Make the rhythms harder as he catches on. Give him a turn choosing the rhythm.

- Take a walk with your child. Find a place to sit down, close your eyes, and describe for each other what you hear: a baby crying, an airplane roaring, a bird singing, cars rumbling, leaves rustling. You can also describe smells.

IT'S A MATCH (AGES 4 - 7)

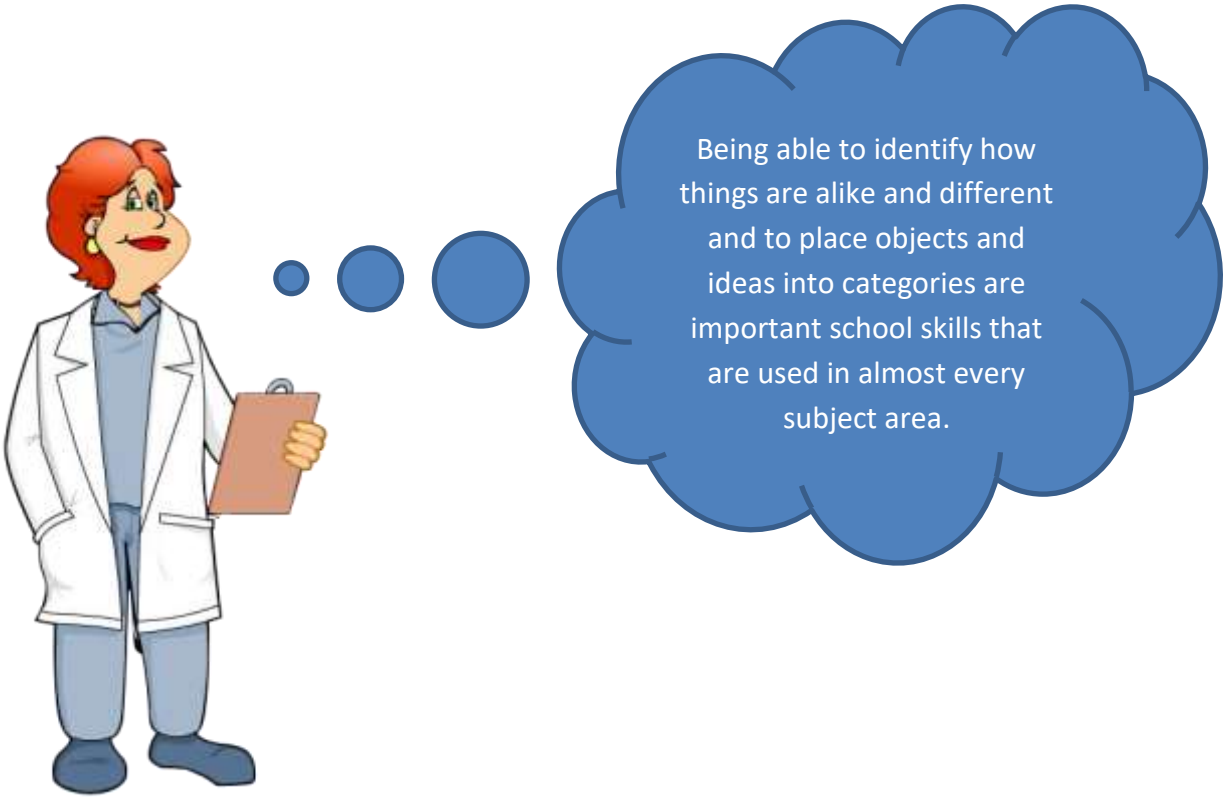
Sorting and classifying helps your child pay attention to details and recognize how things are alike and different.

WHAT YOU NEED:

dishes, flatware, glasses, laundry.

WHAT TO DO

- As you empty the dishwasher or wash and dry dishes, ask your child to make stacks of dishes that are the same size, put glasses that are the same size together, and sort the forks, knives and spoons.
- As you empty the clothes dryer, ask your child to match pairs of socks or put all white things together, all blue things together, and so forth.



LET'S READ (AGES 4 – 7)

Reading is the single most important way for your child to develop the knowledge needed to become successful in school.

WHAT YOU NEED:

children's books, and
books of riddles, tongue twisters and silly rhymes.

WHAT TO DO:

- Read with your child. Take turns, with you reading one page or paragraph and your child reading the next. You might also read the parts of different characters in a story. Be enthusiastic about reading. Read the story with expression. Make it more interesting by giving the characters different voices and accents, making sound effects and using facial expressions, gestures and actions. Encourage your child to do the same.

- Help your child read new words by having him act as a detective and use what he knows about letters and the sounds they make to sound out the words.

- If he is unsure of the meaning of a word, help him learn to use context, the surrounding words or sentences, to figure it out. If this doesn't help, just tell him what the word means and keep reading.

- Buy a children's dictionary—if possible, one that has pictures next to the words. Then start the "let's look it up" habit.

When reading is a regular part of family life, parents send their children a message that it is important and enjoyable.

AUTHOR! AUTHOR! (AGES 4 – 7)

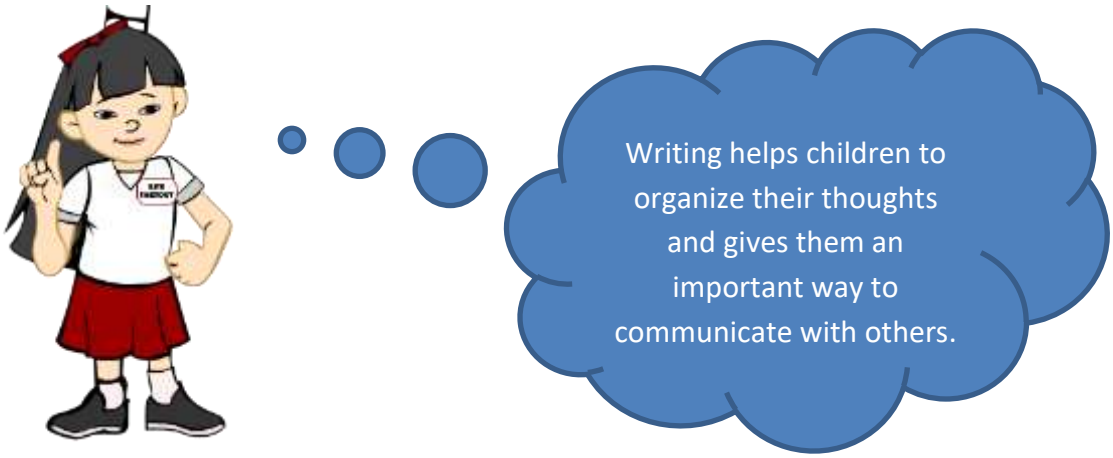
Reading and writing support each other. The more your child does of each, the better he will be at both.

WHAT YOU NEED:

pencils, crayons or markers, writing paper,
cardboard or heavy construction paper,
safety scissors, and
yarn or ribbon.

WHAT TO DO:

- Write with your child. Talk with him about your writing so that he begins to understand that writing means something and has many uses.
- Hang a family message board in the kitchen. Leave notes there for your child and ensure that he reads notes left for him.
- Help your child write notes or e-mails to relatives and friends to thank them for gifts or to share his thoughts. Encourage the relatives and friends to answer your child.
- As your child gets older, he can begin to write longer stories. Ask questions that will help him organize the stories with a beginning, middle and end.
- To encourage pride in his work, help your child turn his writing into books. Paste his drawings and writings on pieces of construction paper. For each book, have him make a cover out of heavier paper or cardboard, then add special art, a title and his name as author.



NOW YOU SEE IT, NOW YOU DON'T (AGES 4 – 7)

Doing simple science experiments at home can prepare your child to learn important science concepts—and the need to be patient.

WHAT YOU NEED:

2 ice cube trays,
clock,
small bowls,
paper and pencil, and
water and other liquids, such as fruit juices.

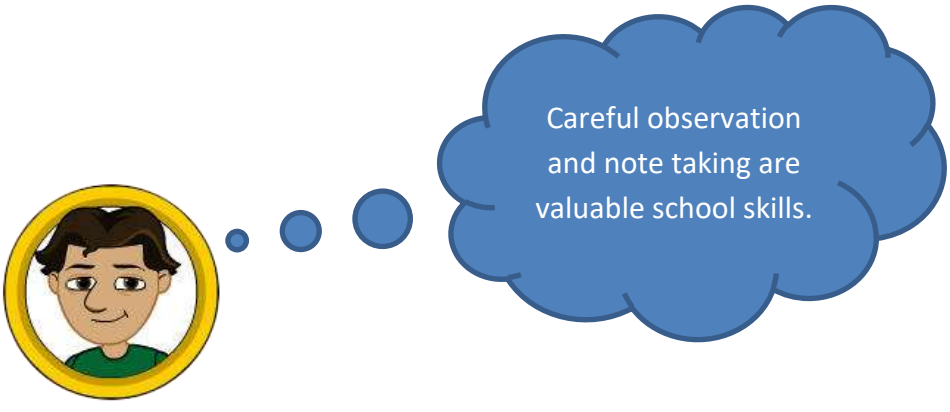
WHAT TO DO:

- Give your child a pencil and paper, and tell her that she is going to be a scientist and take notes about what she observes in some experiments.

- Together with your child, fill one ice cube tray to the top with water (or fruit juice). Fill the other tray only half full. Put both trays in the freezer. Have your child record the time. Tell her to watch the clock and check every 30 minutes or so to see if the water in each tray has frozen (if not, wait until it *has* frozen).
  - Ask your child to write down how long it took the water in each tray to freeze.
  - Ask her which amount of water froze faster and speculate as to why that might be.

- Have your child take one ice cube from each tray and put them in separate bowls to melt. Ask her to write down which cube melts faster—the larger one or the smaller one.

- Put one ice cube in a window and another in the refrigerator (not the freezer) and have your child write down how long they each take to melt.



HOW MUCH DOES IT WEIGH? (AGES 4 – 7)

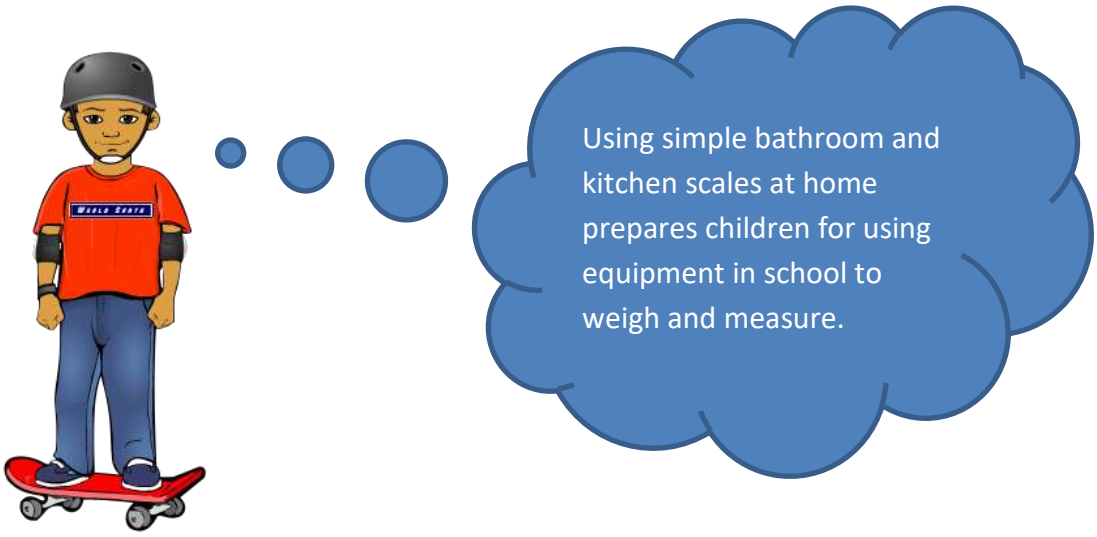
Build your child's interest in math and science by helping him to observe, estimate and weigh objects at home.

WHAT YOU NEED:

bathroom scale,
objects to weigh, such as bags of sugar, flour, potatoes or onions, shoes of different sizes, etc., and paper and pencil.

WHAT TO DO:

- Show your child two objects such as a five-pound bag of sugar and a ten-pound bag of potatoes and ask him to guess which weighs the most. Show him how to use a scale to weigh the objects. Have him record the weights.
- Next, show him several objects and ask him to guess how much each one weighs. Have him write his estimates, and then weigh the objects.
- Have your child estimate his own weight, as well as that of other family members, and use the scale to check his guesses.



START TO FINISH (AGES 4 – 7)

Organization is an important life skill. Help your child learn to plan, do, and finish a job.

WHAT YOU NEED:

pencil and paper, and
items used to do a job around the house, such as watering plants or setting the table.

WHAT TO DO:

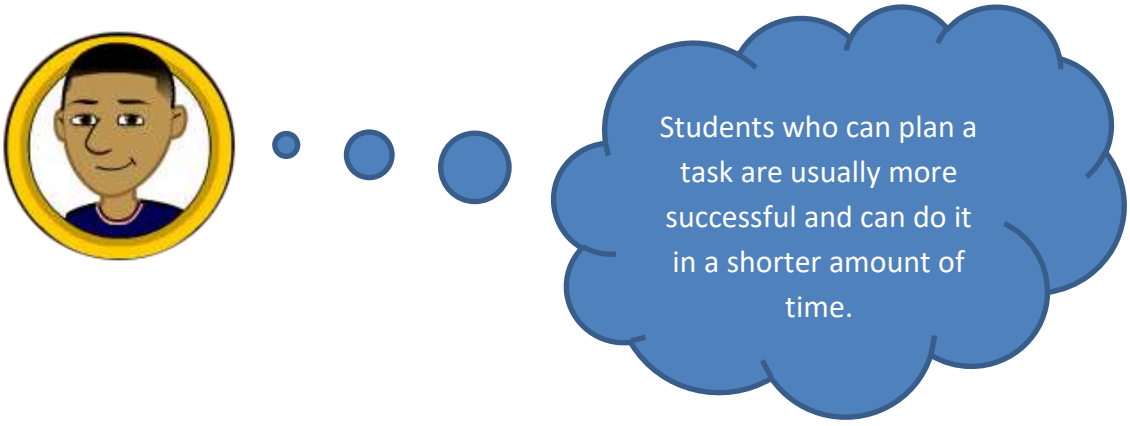
- Together with your child, select a job he usually does around the house, such as watering the plants. Ask him to make a chart like the one below, then write down or tell you the steps needed to do his job well – planning, doing and finishing. Look over these steps together and talk about possible changes.

Planning	Doing	Finishing
1. get supplies: - watering can - paper towels	1. fill can 2. water plants 3. wipe up spills 4. pick up dead leaves	1. throw away used paper towels and dead leaves 2. put away can

- List the three steps of one or two jobs that you do around the house. Ask your child to help you think of ways that you can improve each step to complete the job more efficiently.

- When you give your child a new task, help him plan the steps so that he can do the job well and have a sense of accomplishment.

.



WHERE DID I PUT THAT? (AGES 7 – 9)

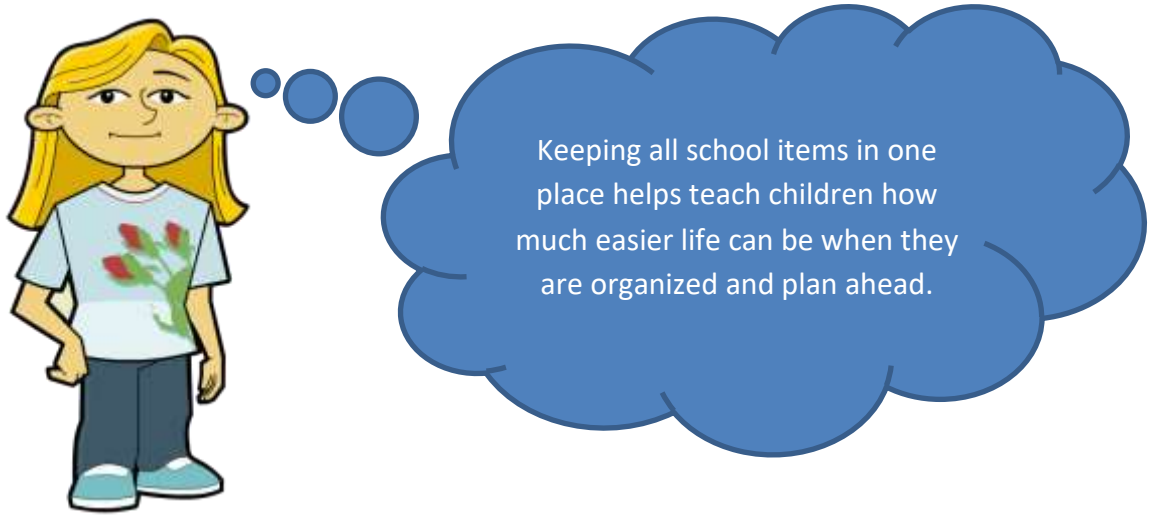
Older children also need help getting organized. Creating a special place for school items will help make mornings smoother for both you and your child.

WHAT YOU NEED:

cardboard box, and
crayons or markers.

WHAT TO DO:

- Find a sturdy cardboard box or carton large enough to hold notebooks and other school things. Let your child decorate it with pictures, words or artwork and her name.
- Let your child know that her school things should go in the box as soon as she comes home from school. All homework and anything else she will need for school the next day should also go into it.
- Let your child make a rainy-day box and put it in a different place (or make it a different color). Have her fill it with "treasures"—games, books, pencils, craft supplies, photographs, souvenirs and keepsakes.
- Show your appreciation when your child keeps things in order.



MAKING MONEY (AGES 7 – 9)

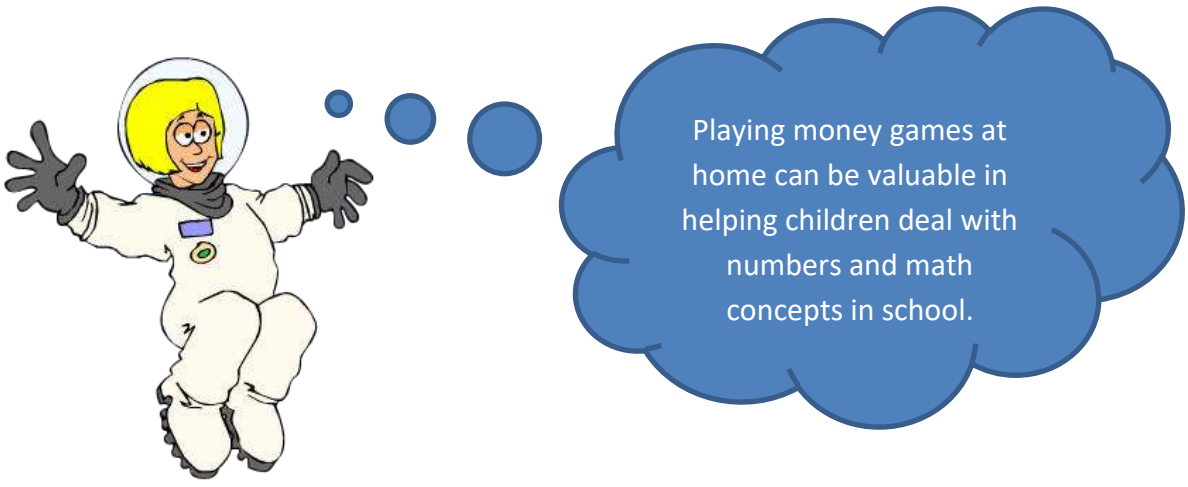
Help your child learn about money. Children can be confused by money. Some might think that the larger a coin is the more valuable it is—so a penny or nickel would be more valuable than a dime.

WHAT YOU NEED:

dice, and
pennies, nickels, dimes, quarters.

WHAT TO DO:

- This is a good game to play with the family. Have each player roll the dice and say the number. Then give the player that number of pennies.
- When a player gets five pennies, replace the pennies with a nickel. When he gets ten pennies, replace them with a dime.
- The first player to reach the set amount—25 or 50 cents, for example—wins.
- If your child can add and subtract, have him pretend to be a cashier at the store and make change for items that you 'buy'.



READING ON THE GO (AGES 7 – 9)

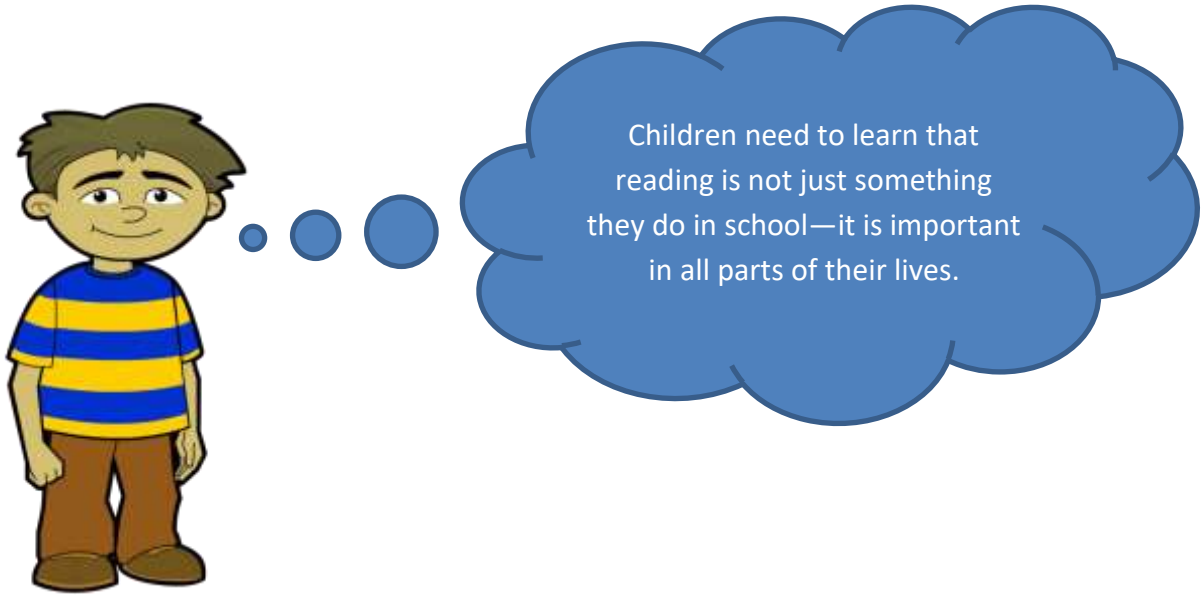
Show your child that reading has value in everyday life.

WHAT YOU NEED:

map of your areas, and
bus, subway and/or train schedules for your area.

WHAT TO DO:

- Help your child use a map to mark a route to a special place, such as his school, the football stadium, the mall or his grandmother's house. Help him figure out the distance to the place.
- Next, give him a bus, subway or train schedule, and have him find departure and arrival times and the rates. Plan a fun trip, and have him figure out how long the trip would take and how much it would cost.



MY TIME LINE (AGES 7 – 9)

You can help your child use events in her own life to gain both a sense of time and understand the order in which things happen.

WHAT YOU NEED:

shelf paper,
yardstick, and
pencils, makers or crayons.

WHAT TO DO:

- Place a long piece of shelf paper on the floor. Have your child use a yardstick to draw a line that is three feet long.

- Talk with your child about important dates in her life, such as the day she was born, her first day of kindergarten or first grade, the day her best friend moved in next door, and so forth. Tell her to write the dates on the line. Invite her to add dates that are important for the whole family. For example, the day her baby brother was born, or the day her favorite aunt got married, or the dates of any important historical events. Your child can add photos or art.

- Display the finished timeline and ask your child to tell other family members and friends what it shows.

.

Making and reading time lines helps children learn about the flow of history and to develop an understanding of cause and effect.

TIME FLIES (AGES 9 – 11)

"I don't have time to do that!" Sound familiar? Learning to plan and organize time is one of the most useful things that your child can learn. Learning to predict how long something will take can save time and prevent temper tantrums.

WHAT YOU NEED:

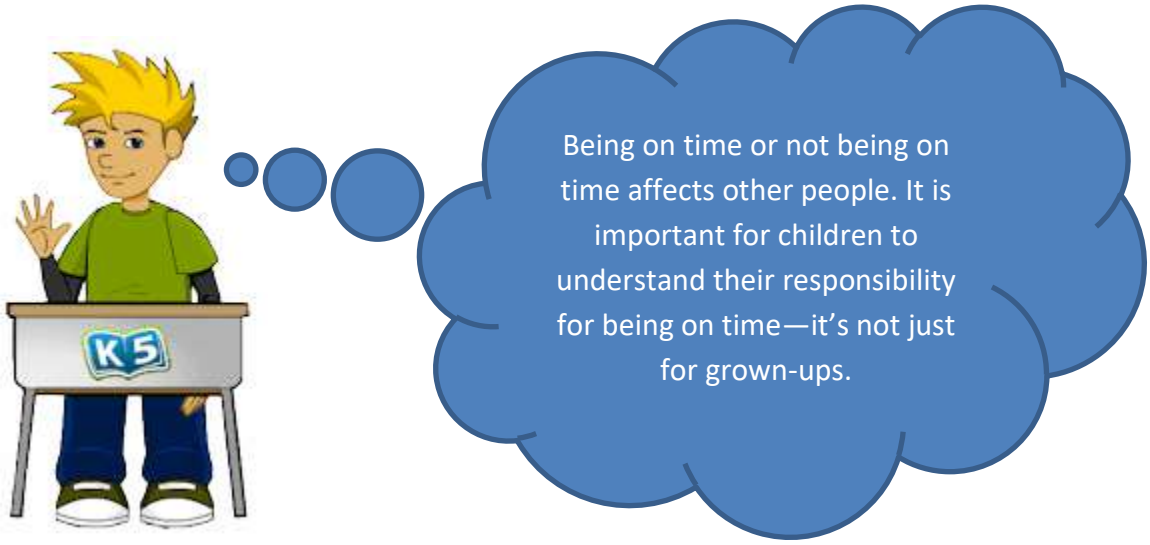
paper and pencil,
clock, and
calendar.

WHAT TO DO:

- Together with your child, write down estimates of how long it takes each of you to do certain tasks (such as getting ready for school or work in the morning, ironing a blouse, making toast). Use a clock to time at least one of these tasks. Then take turns timing each other. (Be realistic—it's not a race).

- Talk with your child about what part of a job can be done ahead of time, such as deciding at bedtime what to wear to school the next day.

- Talk about at least two places that you and your child go regularly where you must be on time. What do you need to do to make sure you are on time?



HOMEWORK MADE EASY (AGES 9 – 11)

A homework chart can show your child exactly what he needs to do and when he needs to do it.

WHAT YOU NEED:

poster board or large sheet of sturdy paper,
marker, pen or pencil, and
clock.

WHAT TO DO:

- Help your child create a homework chart like the following out of a large piece of sturdy paper:

Subject	Mon.	Tue.	Wed.	Thur.	Fri.
Language Arts					
Social Science					
Math					
Science					

  Depending on how many subjects your child has, he may be able to put three or four weeks on each piece of paper.

- Help him attach a colored marker or pen to the chart so that it is always handy.

- After school each day, have your child put a check mark in each box for which there is a homework assignment. Circle the check when you have seen that the homework is completed.

- Tell your child to try to figure out how long it will take him to complete each homework assignment so that he will be able to schedule his time.

Children need to know that their family members think homework is important. If they know their families care, children have a good reason to complete assignments and turn them in on time.

DIVIDE AND CONQUER (AGES 9 – 11)

Just about anything is easier to do if it's divided into smaller pieces. As your child's assignments get longer and more complicated, she needs to acquire more organizing and planning skills.

WHAT YOU NEED:

homework assignments or chores, and
paper & pencil.

WHAT TO DO:

- Have your child choose a big homework assignment to talk about, such as a geography project. Help her make a list of what she needs to complete the job. For example:

  Reference Materials (books, maps)
  Ask: Can you complete the assignment by just using your textbook? If not, do you need to go to the library? If so, can you check out books or will you have to allow time to stay there and use reference books? Can you use computer websites? Do you have the addresses for approved sites? Does your teacher have them?

  Taking Notes.
  Do you have a notebook? Pencils?

  Finished Project
  Can you do this assignment on a computer? Will you need to staple the pages together? Do you need a report folder or cover? Do you need to draw pictures or make charts?

- Help your child decide the order in which the parts of the job need to be done. Have her number them. To help her estimate how long each part of the assignment will take, tell her to work backward from the date the assignment is due. Have her write down start and finish dates next to each part and record them on her calendar.

- Together, think about a household job, such as cleaning out a closet or mowing the yard. Help your child divide it up into smaller parts.

- Talk with your child about how you divide work into manageable parts.

Learning to see big jobs in small pieces can make them less overwhelming for a child.

HELP WANTED (AGES 9 – 11)

Older children are interested in life beyond school. You can help your child have a realistic sense of that life and what he can do to prepare for it.

WHAT YOU NEED:

pencil and paper, and
newspaper or online help-wanted ads.

WHAT TO DO:

- Talk with your child about what he wants to be and do in the future. Ask, for example, "What job do you think you'd like to do when you get out of school? What kind of education or training do you think you'll need to get this job?"

- Suggest that your child pick two adults he or she knows and talk with them briefly about their jobs. Help him think of at least three questions to ask. Have him write the questions, leaving space for the answers. Here are some sample questions:
  What is your job?
  How long have you had it? Do you like it?
  Did you need to go to college to get your job?
  Did you need any special training?
  What kind of classes do I need to take in high school for a job like yours?

- After the interview, talk with your child about what he learned.

- Next, show your child the help-wanted ads. Have him find ads for three jobs that he might want to have in the future. Have him read aloud the requirements for a job and talk with him about the skills, education and training he would need to have to do the work.

Help your child understand that many jobs require advanced education, and almost all jobs require good reading and math skills. Emphasize the importance of being well-educated.

TOOLS

Please find below some tools which might help your kids stay organized.

- Full Year Calendars
- Month at a Glance
- Daily Reading Logs
- Weekly Homework Planner
- Assignment Tracker
- Project Planner

Calendar 2021

January

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

February

S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28						

March

S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

April

S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

May

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

June

S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

July

S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

August

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

September

S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

October

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

November

S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

December

S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

Jan 01: New Years Day	**Jan 20: M L King Day**	**Feb 14: Valentine's Day**	**Feb 17: Presidents' Day**
Apr 10: Good Friday	**Apr 12: Easter Sunday**	**May 10: Mother's Day**	**May 25: Memorial Day**
Jun 21: Father's Day	**Jul 04: Independence Day**	**Sep 07: Labor Day**	**Oct 12: Columbus Day**
Oct 31: Halloween	**Nov 11: Veterans Day**	**Nov 26: Thanksgiving Day**	**Dec 25: Christmas**

Calendar 2022

January

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

February

S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28					

March

S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

April

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

May

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

June

S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

July

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

August

S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

September

S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

October

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

November

S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

December

S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

Jan 01: New Years Day	**Jan 20: M L King Day**	**Feb 14: Valentine's Day**	**Feb 17: Presidents' Day**
Apr 10: Good Friday	**Apr 12: Easter Sunday**	**May 10: Mother's Day**	**May 25: Memorial Day**
Jun 21: Father's Day	**Jul 04: Independence Day**	**Sep 07: Labor Day**	**Oct 12: Columbus Day**
Oct 31: Halloween	**Nov 11: Veterans Day**	**Nov 26: Thanksgiving Day**	**Dec 25: Christmas**

Month At Glance

Month: _____ **Year:** _____

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday

Daily Reading Log

Name: _____ Month: _____

Date	Name of Book	Author	Time Spent Reading

Weekly Planner

	TASK	TIME	COMPLETED
MONDAY			☐
			☐
			☐
			☐
TUESDAY			☐
			☐
			☐
			☐
WEDNESDAY			☐
			☐
			☐
			☐
THURSDAY			☐
			☐
			☐
			☐
FRIDAY			☐
			☐
			☐
			☐

Assignment Tracker

Class:	Semester:

Assignment	Due Date	Grade

Project Planner

Class

Due Date

Assignment

Ideas

1) _____
2) _____
3) _____
4) _____
5) _____
6) _____
7) _____

Steps

1) _____
2) _____
3) _____
4) _____
5) _____
6) _____
7) _____

Material

1) _____
2) _____
3) _____
4) _____
5) _____
6) _____
7) _____

Resources

1) _____
2) _____
3) _____
4) _____
5) _____
6) _____
7) _____

Notes