Rising Second Grade

2017 MATH SUMMER PACKET

STUART

COUNTRY DAY SCHOOL OF THE SACRED HEART

Dear Parents,

Each student is expected to engage in fun and consistent math practice throughout the summer to avoid the summer slide. Brains need rest, too, however, so don't forget to take some time off.

Summer Work Expectations and Guidelines:
1. Spend time on DreamBox.
2. Print out this packet. If you don't have access to a printer, you may pick up a hard copy at school. The student work portion is due the first day of school to next year's teacher.

- The packet includes problems from different areas of the 1st grade curriculum. It is expected that the students are entering into 2nd grade having mastered these areas. Particular areas of strength and growth are noted in your child's report card.
- If your child completes the packet in June and doesn't solve any math problems for the rest of the summer, she will lose some very important concepts. This packet should be spread out, repeated or tweaked along the way to provide consistent practice.
- The pencil and paper portion includes some questions that are from the next grade level. Do not worry if your child has difficultly, or hasn't mastered these extensions.

Suggested Schedule:
Weekly: DreamBox and a page from this packet. The last page is open-ended problems and should be spread throughout the summer, with the suggestion of 1 – 2 problems/week.
1st grade students should have fluency with addition and subtraction facts to 10. As they enter 2nd grade, you can extend the addition and subtraction facts to 20.

Parents: You have homework too!
Recommended Books and Resources:
Jo Boaler's Parent Resources: Jo Boaler's Youcubed.org from Stanford University
The Opposite of Spoiled by Ron Leiber

Family Activities:
- Involve your daughter in your shopping experiences. While we love to use our debit and credit cards, find time to allow your child to pay with cash. Other activities include estimating the total cost of the purchase, deciding between items based on price or wants and calculating how much change should be given when paying.
- Board games are a wonderful way for your child to learn turn-taking, game strategies, money, counting and perseverance. These are critical to developing a strong mathematician.
  - Good games: Chess, Blokus, Monopoly, Parcheesi, Candyland, Sorry, Mancala
- Measure, cook and bake with your daughter!
- Involve your daughter in calculating distance traveled, time spent traveling and make the "Are we there yet?" into a math problem!

Resources for solving word problems and math facts:
- http://www.mathfactcafe.com/
- http://www.gregtangmath.com

Resources to Practice Computation and Fact Fluency

Play math games in the car such as:
- <u>Triangle Math Facts</u>: Give three numbers from a combination and the child names the associated facts. For example, Adult says, "Three, nine, six." Child answers, "3 + 6 = 9, 6 + 3 = 9, 9 – 6 = 3 or 9 – 3 = 6."
- <u>Number partners</u>: Adult picks a target number. Adult says a number, child answers with the corresponding number that will equal the target number. For example, if the target number is 6: adult says 4, child says 2.

Card Games: (These are just a couple)
- <u>War</u>: (addition or difference war) Each player flips over two cards and finds the sum/difference. The player with the greatest sum/difference wins the round.
- <u>Target Number or 24</u>: Using 4 – 5 digits, players add and/or subtract to make the target number. (You can buy the game 24 or there's an app too!)

Free websites:

Name	Website
Greg Tang Math	gregtangmath.com
Calculation Nation	http://calculationnation.nctm.org/
Mathbreakers	https://mathbreakers.com
Addition & Subtraction Math Magician	http://www.oswego.org/ocsd-web/games/Mathmagician/mathsadd.html http://www.oswego.org/ocsd-web/games/Mathmagician/mathssub.html
Fact Monster	http://www.factmonster.com/math/flashcards.html

Websites that require a subscription:

Name	Website	Description
ixl	www.ixl.com	A website that provides practice with topics organized by grade level or by standard (check privacy policy)

Apps: There are many, many apps that give explicit fact fluency practice. Choose the one your child likes the most!

Name: _____

Keep track on the logs below to show the time you spent on DreamBox, completed pages from this packet, and anything else educational you did this summer. This is due the first day of school with completed math pages.

Homework Log for June:

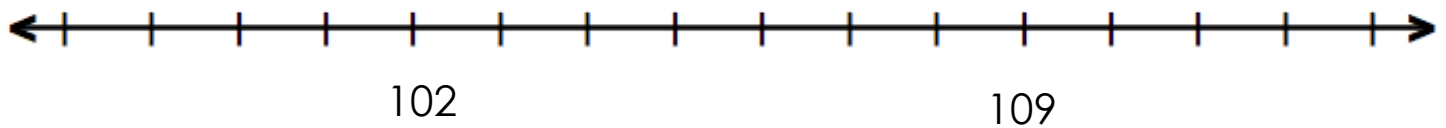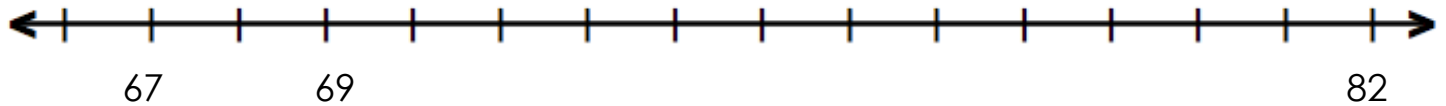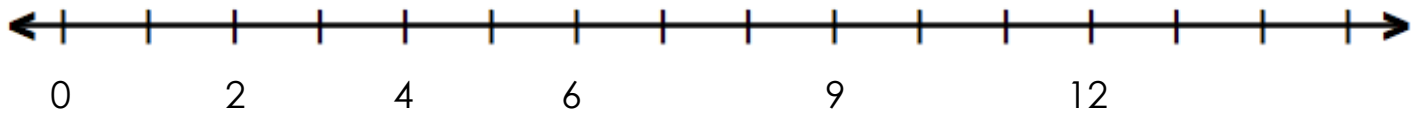| Date/Week	Activity

Homework Log for July:

Date/Week	Activity

Homework Log for August:

Date/Week	Activity

Reading, Writing and Sequencing Numbers into the 100s

Fill in the missing numbers on the number lines below.

0   2   4   6   9   12
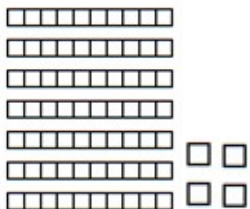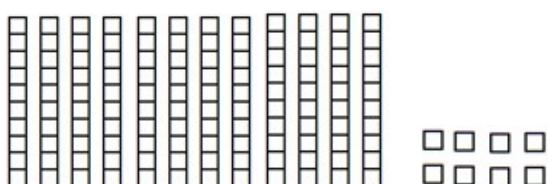
67   69   82

102   109

Extend and Continue:

305
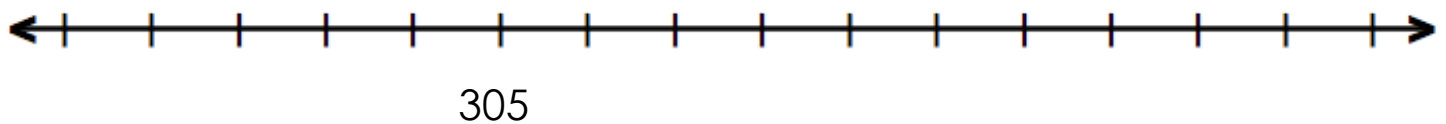
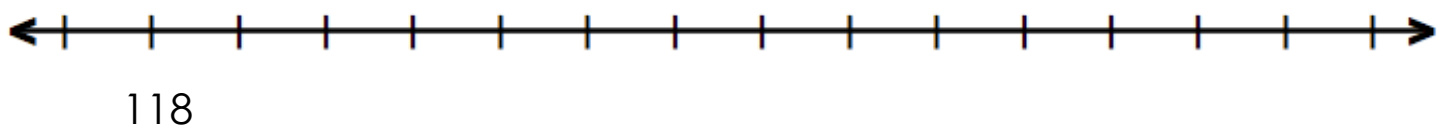**Place Value:**
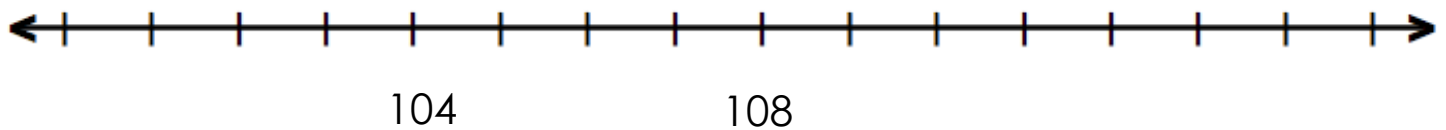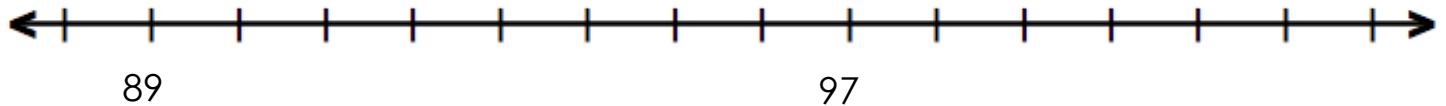What number is shown below in Base 10 blocks?
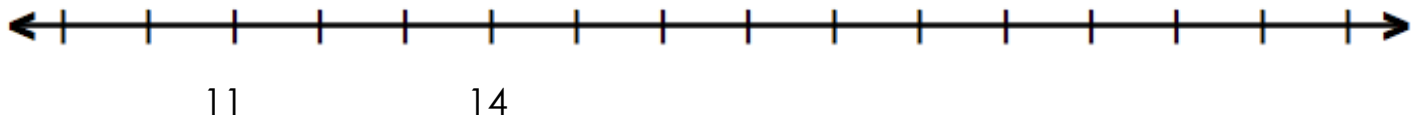
What number is shown below in Base 10 blocks? _____
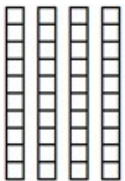
Reading, Writing and Sequencing Numbers into the 100s

Fill in the missing numbers on the number lines below.

11   14

89   97

104   108

118

121   128
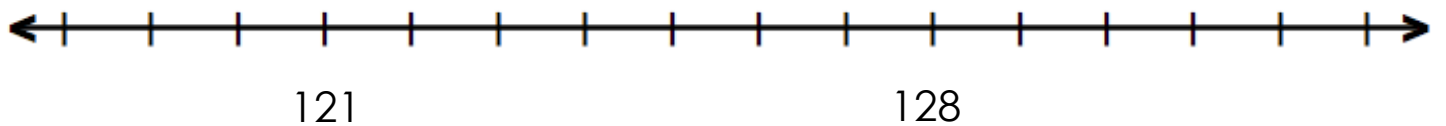
Place Value:
What number is shown below in Base 10 blocks?

Draw the number 83 in Base 10 blocks below:

Understanding Place Value

1. What is the value of the underlined digit in 5̲7? _____

What is the value of the underlined digit in 5̲7̲? _____

2. In the number 85, is the 8 in the tens place or ones place? _____

3. What is the value of the underlined digit in 1̲38? _____

What is the value of the underlined digit in 13̲8̲? _____

What is the value of the underlined digit in 13̲8̲? _____

4. Compare the numbers below by using >, <, or =

a. 91 _____ 19   **b.** 63 _____ 66   **c.** 105 ____ 112

d. 112 _____ 121   **e.** 210 _____ 198   **g.** 483 ____ 348

5. Which number is bigger 64 or 46? Explain how you know. (Extension 112 or 121)

_____

_____

6. Put the following numbers in order from least to greatest:
                    109, 65, 56, 110, 6, 201

_____

Explain how you know what order to put them in.

_____

Understanding Place Value

1.

What is the value of the underlined digit in 4̲8? _____

What is the value of the underlined digit in 48̲? _____

2. In the number 76, is the 6 in the tens or ones place? _____

3. What is the value of the underlined digit in 1̲41? _____

What is the value of the underlined digit in 14̲1? _____

What is the value of the underlined digit in 141̲? _____

4. Compare the numbers below by using >, <, or =

a. 37 _____ 73   **b.** 52 _____ 51   **c.** 108 _____ 115

d. 116 _____ 161   **e.** 301 _____ 299   **g.** 352 _____ 325

5. Put the following numbers in order from least to greatest:
51, 15, 8, 115, 94

Adding and Subtracting with 10s

a. 30 + 10 = _____

b. 20 + 30 = _____

c. 53 + 10 = _____

d. 71 + 20 = _____

e. 10 + _____ = 81

f. 30 + _____ = 60

g. 15 + 11 = _____

h. 24 + 12 = _____

a. 50 – 10 = _____

b. 70 – 20 = _____

c. 53 – 10 = _____

d. 78 – 20 = _____

e. 40 - _____ = 30

f. 60 - _____ = 40

g. _____ - 10 = 50

h. _____ - 10 = 70

There are 12 cookies in the bag. Some are chocolate chip and some are oatmeal. How many of each could be in the bag? Show all the ways.

Adding and Subtracting with 10s

a. 40 + 10 = _____

b. 50 + 20 = _____

c. 38 + 10 = _____

d. 40 + _____ = 60

e. 10 + _____ = 60

f. 10 + _____ = 55

g. 13 + 12 = _____

h. 25 + 21 = _____

a. 70 – 10 = _____

b. 80 – 40 = _____

c. 49 – 10 = _____

d. 63 – 20 = _____

e. 80 - _____ = 70

f. 50 - _____ = 20

g. _____ - 10 = 40

h. _____ - 20 = 50

Addition and Subtraction

Show how you solved the problem.

6 + 7 = _____

5 + ____ = 11

15 + 3 =_____

12 + 4 = _____

46 + 5 = _____

88 + 3 = _____

10 - 8 = _____

15 - 3 = _____

36 - 3 =_____

48 - 4 = _____

Addition and Subtraction

Show how you solved the problem.

7 + ____ = 12

13 + 4 = _____

____ + 3 = 13

7 + ____ = 13

25 + 3 = _____

32 + 4 = _____

7 - 3 = _____

12 - 4 = _____

11 - 6 = _____

8 - 4 = _____

Solving Story Problems

Write an equation to match the problem & show your work.

a. On Sheila's birthday she brought in cupcakes for the class to share. There were 11 vanilla cupcakes and 8 chocolate cupcakes. How many cupcakes did she bring in? How many more vanilla cupcakes were there than chocolate?

b. The first grade class was studying butterflies. On release day, there were 16 butterflies ready to go. 5 flew away right away but the rest stayed in the cage. How many stayed in the cage?

c. For a food drive the 1st grade had collected some cans of food. Mariah brought in 7 more cans, then there were 15 cans of food. How many cans of food did Mariah bring in?

d. Ms. Beshel made a summer reading list. On her list she wanted to read 5 non-fiction books, 6 mysteries and 4 poetry books. How many books were on her reading list?

Solving Story Problems

Write an equation to match the problem and show your work.

a. The first grade class voted on their favorite colors. 7 students choose pink, 6 students choose blue and 4 students choose orange. How many students are in the class?

b. Stacy had saved $14 dollars. On her birthday, her aunt gave her $5 more. How much money does Stacy have now?

c. Her brother had $12 dollars. He was given money for his birthday too. Now he has $18. How much money was he given?

d. Ms. DiMeglio had $18. She spent $5 at lunch. How much money did she have left?

Open Response Problems
(Solve on a separate sheet)

a. Turn over 2 numeral cards to make a two-digit number. Record the number that is 10 more and the number that is 10 less. Repeat.	b. Use your 0-9 cards. Turn over two cards to make a two-digit number. Roll your die and add the number shown. Record and repeat.
c. Sean had 7 marbles. His sister gave him some more and then he had 11 marbles. How many marbles did Sean's sister give him? Explain your thinking.	d. Roll two dice and draw them. Write the number model and turn around the fact. Repeat.
e. I subtracted one number from another and got a difference of two. What might the two numbers be?	f. Lia's dad baked 18 pies. Some were apple and some were cherry. How many were apple? How many were cherry? Show as many different solutions as you can.
g. Use your 0-9 cards. Turn over 4 cards and make two different two-digit numbers. Write the numbers and use the symbols <,> or = to compare them. Repeat.	h. Sort a cup of mixed food items (raisins, cereal, crackers etc.) Use pictures, numbers and/or words to show how many in each group and how many more or less in one group than another.
i. Use craft sticks, paper clips, pencils, etc to measure how long and how wide your table is. Record.	j. Decide on a 'Yes/No' question that you would like to collect data on. Ask other people your question and record their answers. What did you find out?
k. Ben had 7 toy cars. Meg had 12 toy cars. Sheila had 8 toy cars.
How many cars did they have altogether? Who had the most cars?	l. Trace around different tangrams. Shade and label one half of each shape.

m. Decide on a 'Would you Rather?' question that you would like to collect data on. Ask other people your question and record their answers. What did you find out?	n. Choose a domino. Draw the domino and write all the ways to add or subtract to get to that number. (Fact family)

Number Cards (Print and Cut to Play Card Games)

0	1	2
3	4	5
6	7	8
9	10	