Dear Parents,

You made it! Summer vacation is here and your job as homeschool facilitator is over. Brains need rest, so make sure to take time to have fun and disconnect from school. However, each student is expected to engage in fun and consistent math practice throughout the summer to avoid the summer slide. As the last two months of the year were taught in a distance learning model, the math units for the upcoming year have been adjusted to ensure that any concepts from this year are reviewed and solidified.

The pivotal learning goals in math this year were to become fluent with addition and subtraction facts within 10, develop more efficient strategies for adding and subtracting within 20, and to use place value understanding to begin to add and subtract within 100. Students were also expected to use addition and subtraction strategies to solve word problems. Through the use of base 10 blocks and cubes, first grade students learned how the place value system is a base 10 system and that any 2-digit number is comprised of groups of tens and ones. These learning goals continue into second grade where they expand their knowledge to understanding, adding and subtracting numbers within 1000.

In order to retain these concepts and skills, practice throughout the summer is crucial. Below is a suggested schedule and resources for you to use to continue math practice at home. The goal is to have the girls retain the concepts from this year but also enjoy it. The pace and pressure should be easy and manageable for both you and your daughter.

Summer Work Expectations and Guidelines:
1. Practice the addition and subtraction facts to 10 consistently.
2. Each week complete one page and 1 - 2 open-ended problems from the first page of this packet.

- 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.
- 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 to provide consistent practice.
- It includes some questions that are from the next grade level. Do not worry if your child has difficulty or hasn't mastered these extensions.

Recommended Activities, Games, Websites, and Apps
Family Activities:
- Board games are a wonderful way for your child to learn turn-taking, game strategies, money, counting and perseverance. These are widely overlooked but critical to developing a strong mathematician.
    - Good games: Shut the Box, Blokus, Monopoly, Sorry, Mancala, Chess, 24, Muggins
- Measure, cook and bake with your child!

Games:

Acing Math - (Multiple Operations)
60 Math Games using only a deck of cards!

Dice Games:
https://mailchi.mp/mathforlove/dice-games-for-math-at-home

Websites:

Table Talk Math: a book and an account on Instagram

Bedtime Math: a resource for parents to do with their child

Youcubed.org: https://www.youcubed.org/resource/apps-games/

San Fran's ideas for home (books & activities):
https://www.sfusd.edu/learning/resources-learning/continuity-learning/families

Fluency:
http://calculationnation.nctm.org/Games/
https://www.factmonster.com/math/flashcards
https://www.mathplayground.com/index_multiplication_division.html

Apps for fluency, problem-solving and math fun:

Motion Math
Name that Number - Also known as Target, using addition & subtraction to reach a target number
Kakooma - addition challenges in puzzle format
King of Math - Various types of math problems
Baseball Multiplication - single digit multiplication
Beat the Computer - single digit multiplication
Thinking Blocks – Model and solve word problems (multiple types)
Divisibility – Multiplication and division game

Puzzles, logic, enrichment and problem-solving apps:

Math Munch: https://mathmunch.org/
Sumaze: http://mei.org.uk/sumaze
Math Doodles: http://www.carstensstudios.com/mathdoodles/mathdoodles.htm
Game about squares: http://gameaboutsquares.com/
Symmetry Artist: https://www.mathsisfun.com/geometry/symmetry-artist.html

Name: _____

Open Response Problems

Pick 1 or 2 problems to solve each week. Solve on a separate sheet of paper.

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. Represent 110 using Base 10 blocks. Roll a die and take away that number of tens. Record how many you started with, how many you took away and how many are left. Repeat with different numbers.	d. A teacher turned over 3 dot cards and counted 20 dots. The first card had 8 dots. How many dots did the other two cards have? Show as many different solutions as you can.
e. 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?	f. Represent 92 with Base 10 blocks. Take away 10 and record the new number. Continue taking away one set of 10 at a time until you reach 12. What pattern do you notice?
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. Trace around different tangrams. Shade and label one half of each shape.
i. 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.	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. Choose a domino. Draw the domino and write all the ways to add or subtract to get to that number. (Fact family)	l. Get a collection of items (paper clips, marbles, etc.) Put the objects in your collection into groups. Each group must have the same number of objects. How many different ways can you group the objects so that there are none left over? Record.

Reading, Writing and Sequencing Numbers into the 100s

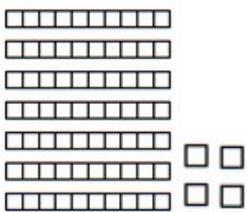**Fill in the missing numbers on the number lines below.**

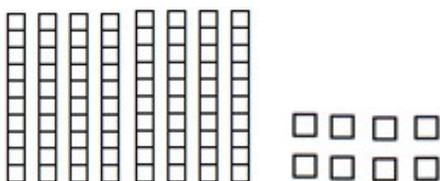0   2   4   6   9   12

72   74

103   109

Extend:

402
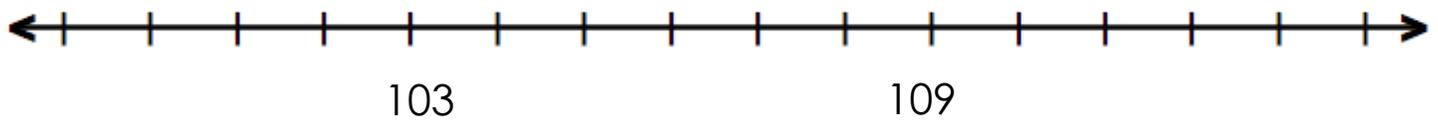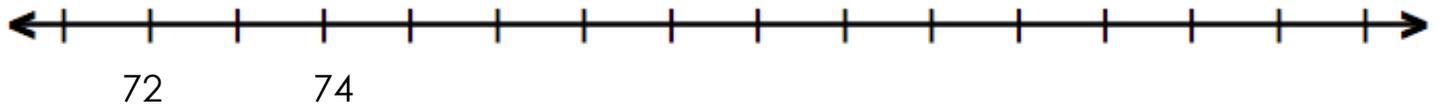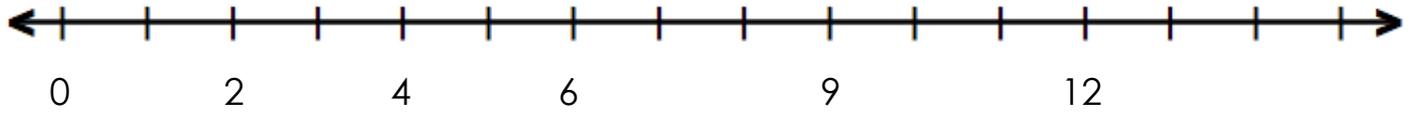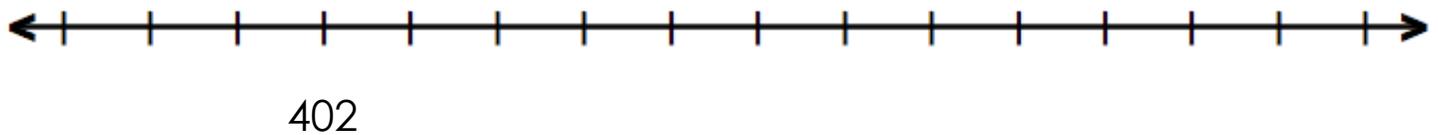
Place Value:
What number is shown below in Base 10 blocks?

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.

91

98

108

113

201
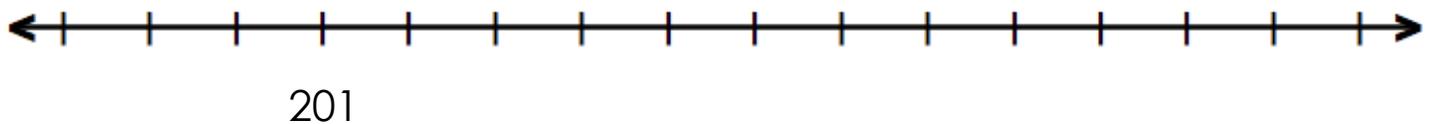
Place Value:
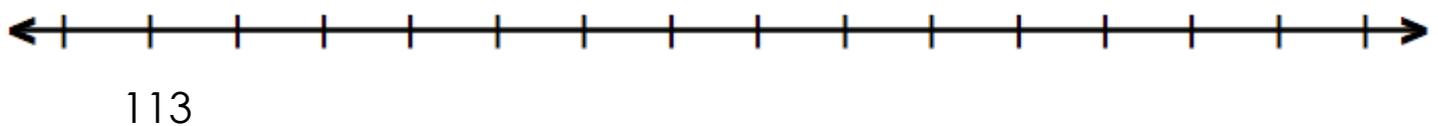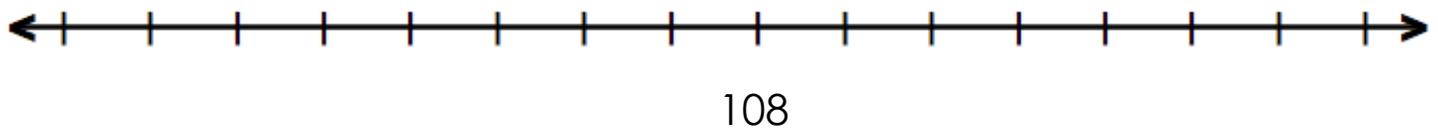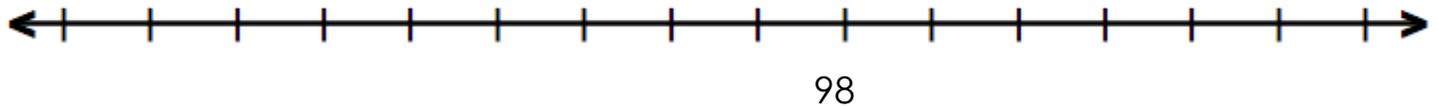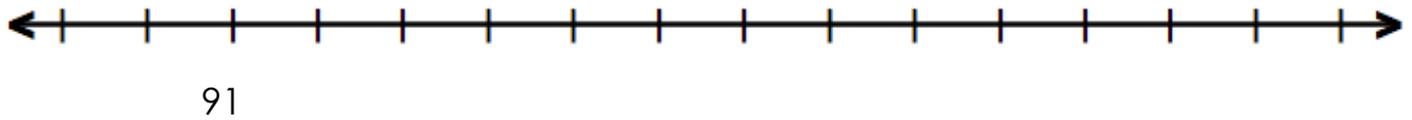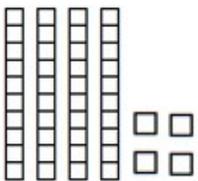
What number is shown below in Base 10 blocks?

Draw the number 83 in Base 10 blocks below:

Understanding Place Value

1. What is the value of the underlined digit in <u>5</u>7? _____
What is the value of the underlined digit in 5<u>7</u>? _____

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 <u>1</u>38? _____
What is the value of the underlined digit in 13<u>8</u>? _____
What is the value of the underlined digit in 1<u>3</u>8? _____

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

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

Extend:

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

Extend:

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. $25 + 21 =$ _____

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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

14 + 4 =_____

11 + 4 = _____

66 + 5 = _____

79 + 3 = _____

10 - 7 = _____

16 - 2 = _____

54 - 2 =_____

38 - 4 = _____

Addition and Subtraction

Show how you solved the problem.

7 + _____ = 15   12 + 4 = _____

_____ + 2 = 11   8 + _____ = 13

24 + 5 =_____   42 + 5 = _____

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9 - 3 = _____   11 - 4 = _____

14 - 6 = _____   8 - 5 = _____

Solving Story Problems

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

a. The green team had 17 points. The white team had 8 points. How many points did they have altogether? How many more points did the green team have?

b. There were 5 deer in Friendship Forest.   Some more joined. Now there are 12 deer. How many joined?

c. Ms. Beshel had 15 pennies. She put 7 pennies in her piggy bank. The rest went into her wallet. How much money did Ms. Beshel put in her wallet?

d. Josie made a summer reading list. On her list she wanted to read 6 non-fiction books, 3 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 collected food for Send Hunger Packing. They collected 6 jars of peanut butter, 5 containers of oatmeal, and 8 toothbrushes. How many items did they collect?

b. David had saved $16 dollars. On his birthday, his uncle gave him $5 more. How much money does David have now?

c. Tony's brother had $8 dollars. He was given money for his birthday too. Now he has $18. How much money was he given?

d. Ms. DiMeglio had $12. She spent $3 at Starbucks. How much money did she have left?