Clover School District
Summer Math Learning Packet
Students Entering Grade 3

These summer math activities will enable your child to review math concepts and reinforce skills learned this year. Just a few minutes each day spent "thinking and talking about math" will help reinforce all the math that has been learned and begin to bridge the foundation for extending to concepts that will be developed next year. The goal is for your child to have fun thinking and working collaboratively to communicate mathematical ideas. While your child is working, ask him/her how the solution was found and why a particular strategy was chosen.

The math practice in this summer packet addresses 4 critical areas in grade 2:
1. extending understanding of base ten notation
2. building fluency with addition and subtraction
3. using standard units of measure
4. describing and analyzing shapes

This packet consists of 2 calendar pages, one for June and one for July. There are problems included for each day of the week, excluding weekends. Literature, APPs and websites are also recommended to explore mathematics in different ways. We encourage your child to complete at least 15 math days each month. We hope your child will spend at least 10 minutes a day, 4 to 5 times a week, practicing math. Create a goal with your child to help him/her stay strong in math over the summer. For example, my child will aim to complete at least 200 minutes of math practice over the course of the summer and keep track of his/her learning in a math journal. A math journal records your work either in print or digital format. See the example of a "great" journal entry.

If the activities suggested do not seem to "fit your child" or you have your own websites/literature/math practice you would like to do, please feel free to substitute your own activities that better suit your child's needs or learning style.

Student mathematicians - keep your mathematics skills sharp and have a safe and enjoyable summer. ☺

Grade 3 Students
Summer Math Ideas

Math Tools You Will Need:

Notebook for math journal	Coins
Pencil	Dice
Chalk	Toothpicks
Regular Deck of Playing Cards	Tape Measure/Yard Stick
Ruler	

DIRECTIONS:

Do your best to complete as many of these summer math activities as you can! Record your work in your math journal every day. In August, share your Math Journal with your third grade teacher.

Each journal entry should:

✓ Have the date of the entry
✓ Have a clear and complete answer
✓ Be neat and organized

Here is an example of a "Great" journal entry:

> June 20, 2022
> Today I found 3 different ways to make $1.00. First, I used 3-quarters, 2-dimes, and 1-nickel to total $1.00. Next, I had 5-dimes, and 2-quarters and this also totaled $1.00. Finally, I had 2-quarters, 2-dimes, and 6-nickels. These are the three different ways I combined coins to make $1.00.

Websites:

http://illuminations.nctm.org/Games-Puzzles.aspx
http://www.funbrain.com/
http://www.aplusmath.com/
http://pbskids.org/cyberchase/math-games/
http://www.gregtangmath.com/
http://bedtimemath.org
http://www.figurethis.org./index.html
http://xtramath.org/
http://www.summermathtools.weebly.com
http://www.mathgoodies.com
http://www.brainbashers.com/
http://hoodamath.com
http://www.mathsisfun.com/index.htm

Math Books to Read:

Amanda Bean's Amazing Dream by Cindy Neuschwander
The Greedy Triangle by Marilyn Burns
Measuring Penny by Loreen Leedy
Math for All Seasons by Greg Tang

Games to Play: (You will need a regular deck of cards.)

1. Compare - Addition and Subtraction
Pass out all the cards to players. Each player flips over two cards. Add or subtract the two numbers showing. Players compare their values and the person with the higher value wins all four cards.

2. Close to 100
Deal 6 cards to each player. Use any 4 of your cards to make two 2-digit numbers. (Aces = 1; Jacks, Queens, & Kings = WILD cards, stand for any digit 0-9) Try to make a combination that when added is close to or exactly 100.

5	4	3	A	8	3

You combine 48 and 53 to make 101. Your score is 1 since the difference between 101 and 100 is 1. You make a recording sheet in your journal like this: Round 1: 48 + 53 = 101 Score 1.

Put the cards you used in the discard pile. Keep the other two for the next round. Pick up four more cards and play 5 rounds. Add the score to each round. The lowest score after 5 rounds wins.

Other games to play: Checkers, Othello, Memory, Set, jigsaw puzzles, Parcheesi, Crazy Eights, Connect Four, Legos, K'Nex.

Worksheets to Practice Math:

http://www.commoncoresheets.com/
http://www.gregtangmath.com/resources

APPs:

Grades 3-5	All Grades
• Everyday Mathematics, Addition Top It	• KENKEN
• Everyday Mathematics, Beat the Computer, Multiplication	• Kakooma Addition, Times
• Everyday Mathematics, Divisibility Dash	• Quick Math – Arithmetic & Times Tables
• Everyday Mathematics, Equivalent Fractions	• Pick-a-Path
• Pizza Fractions 1	• Sumdog
• My Times Tables	• Conundra Math
• Tony's Fraction's Pizza Shop	• Thinking Blocks
• Pearl Diver HD	• Fast Facts Addition, Subtraction
• Lobster Diver HD	• Fast Facts Multiplication, Division
• Factor Samurai – multiplication and division	
• Fraction App by tap to Learn	
• Dare to Share Fairly	
• Long Division Touch	
• Math Ninja HD	
• Quick Math	
• Wuzzit Trouble	
• Sushi Monster	
• Deep Sea Duel	
• Zap Zap Fractions	
• MathLand (Critical Thinking skills)	

June 2022 Entering Third Grade Mathematics Calendar

| Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	June		1 Play a strategy game like **Othello** or **Checkers.** Plan a strategy to win. Did your strategy work? Will you try a different strategy the next time you play? Play again with a different strategy.	2 500+60+8 is a number. Write it as a three-digit number. Write its name in words. Draw a picture to represent the number. Locate it on the number line.	3 You have $1.50 in your pocket. Make a list of 10 different combinations of coins you could have in your pocket.	4
5	6 Cut out a picture from a magazine or newspaper. Glue it to a piece of paper. Write a story problem to go along with the picture. Challenge a friend to solve it!	7 Find a flower with an odd number of petals. Draw a picture of the flower. Do all flowers have the same number of petals?	8 Read Measuring Penny by Loreen Leedy. Find an animal, real or stuffed, to measure with inches and centimeters.	9 You won first place at a contest! You have two choices for the prize -You can take $20 home with you today OR $2 a day for the next 15 days. Which option earns more money? How much more?	10 Add the ages of all the people who live in your house. What is the sum? Is it greater than or less than 100? By how much?	11
12	13 Keep track of the temperature every day for the week. Draw a bar graph. Compare the difference in temperatures.	14 Using sidewalk chalk write as many multiplication facts as you know in one minute.	15 Use all the digits 5, 7, and 2 to create different 3-digit numbers. What is the greatest number? What is the smallest number? How do you know?	16 Find at least 5 different ways to make $1.00 using nickels, dimes, and quarters.	17 Use <, =, or > to complete the following number sentences. 657____457+100+100 923+10____953-10-10-10 Write one of your own.	18
19	20 Read Amanda Bean's Amazing Dream by Cindy Neuschwander. Count all of the books in your house.	21 Write the numbers below in expanded form. (Ex. 583 = 500 +80 +3) 729 846 295	22 100 is the answer, what could the question possibly be? Challenge yourself to think of more questions.	23 Pia was having a party. She put 10 stickers in each party bag. She made 12 bags with 10 stickers in each one. How many stickers total were in the 12 bags?	24 Explore one of the recommended websites. What math did you learn?	25
26	27 Play Close to 100. (see directions) How does it help you to get better at addition?	28 Using sidewalk chalk write as many division facts as you know in one minute.	29 Ask an adult to teach you a card trick. Practice the trick and try it out on a friend. What math was involved?	30 Plant a seed. Will it grow to be about 12 inches or 12 feet? How do you know? Measure and record the height twice a week to keep track of how high it grows.	**We encourage your child to** **complete at least 15 math days each month,** **spend at least 10 minutes a day, 4 to 5 times a week, practicing math,** **use a math journal to record his/her work, and** **create a goal to help him/her stay strong in math over the summer.**	

July 2022 Entering Third Grade Mathematics Calendar

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
We encourage your child to • **complete at least 15 math days each month,** • **spend at least 10 minutes a day, 4 to 5 times a week, practicing math,** • **use a math journal to record his work, and** • **create a goal to help him stay strong in math over the summer.**					**1** 115 + 6 = 113 + ___ Copy this problem in your journal and fill in the blank. Explain how you got the answer.	**2**
3	**4** If you start playing a game at 8 a.m. and play for one and a half hour, what time is it when you're done? How do you know?	**5** Read The Greedy Triangle by Marilyn Burns. Follow along using toothpicks to make the polygons.	**6** How many times can you hop on your left foot in a minute? Your right foot? Compare the number of hops using the symbols <, > or =. What is the difference?	**7** Starting with 101, skip count by 100 until you get to 1,001. What pattern do you notice? Try different numbers to start with. Does the pattern change?	**8** Use a grocery store flyer to plan a breakfast. List all the items you need and record the price of each item. How much will breakfast cost?	**9**
10	**11** Go on a shape hunt for quadrilaterals. How many can you find? How are their attributes the same or different?	**12** How many ten-dollar bills equal a hundred-dollar bill? Jen had 20 ten-dollar bills. How many hundred-dollar bills can she trade them for?	**13** Play **Guess My Rule** on the following website. www.mathplaygound.com What new math vocabulary did you learn?	**14** Estimate how long it will take you to do 100 jumping jacks. Did it take more or less than 5 minutes? Record your time and compare with a friend.	**15** Find a bar graph in a newspaper, magazine, or online and talk to an adult about what the numbers mean.	**16**
17	**18** Play **Building Blocks** on the following website - www.mathplayground.com. Describe how you see the shapes fitting together.	**19** Stand and jump as far as you can, and measure using a yardstick, meter stick, or tape measure. Jump 3 times and compare your measurements.	**20** Play **Compare.** (see directions) How does this help you to practice your facts?	**21** Write down the years people who live with you were born. Put them in order from least to greatest.	**22** Ask an adult to listen to you as you: Count to 100 by 10's Count to 100 by 5's Count to 1000 by 100's	**23**
24 **31**	**25** Play **Close to 100.** (see directions) How does it help you to get better at addition?	**26** Explain how you add 43+34+57+24.	**27** Read Math for All Seasons by Greg Tang. Make up your own math riddle.	**28** Compare and record some three-digit numbers using >, < and =. Example: 324 > 314	**29** Play **Hidden Picture Subtraction** from the website below. www.aplusmath.com YOU DID IT! Please bring your journal to your third grade teacher on the first day of school.	**30**

Grade 3 Answer Key - 2022

Answers will vary for many of the activities depending on the choices students make.
Here are the answers for activities with specific solutions.

June 2
500+60+8=568. The number is five hundred sixty-eight.
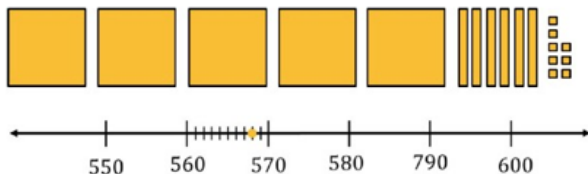
June 3
Examples:
150 pennies	4 quarters and 50 pennies
140 pennies and 1 dime	15 dimes
140 pennies and 2 nickels	10 dimes and 10 nickels
6 quarters	10 dimes, 5 nickels, 25 pennies
5 quarters and 25 pennies	4 quarters, 1 dime, 6 nickels, 10 pennies

June 9
Option 1 is worth $20
Option 2 is worth s worth $30.
Since $30 - $20 = $10, Option 2 is worth 10 more dollars than Option 1.

June 15
Listed are all of the 3-digit numbers: 752, 725, 572, 527, 275, and 257. The greatest number is 752 and the smallest number is 257.

June 16
Examples:
3 quarters, 1 dime, 3 nickels	2 quarters, 2 dimes, 6 nickels
2 quarters, 4 dimes, 2 nickels	2 quarters, 1 dimes, 8 nickels
2 quarters, 3 dimes, 4 nickels	

June 17
657 **=** 457+100 + 100
923+10 **>** 953−10−10-10

June 21
729 = 700 + 20 + 9
846 = 800 + 40 + 6
295 = 200 + 90 + 5

June 22
Example:
Cameron found 53 shells at the beach. Kellen found 47 shells. How many shells do they have altogether?

June 23
12 groups of ten equals 120 stickers.

July 1
115 + 6 = 113 + _8_
The answer is 8 because 113 is 2 less than 115, and 8 is 2 more than 6.

July 4
9:30 a.m.
8 am to 9 am is one hour. 9 am to 9:30 am is a half hour.

July 7
101, 201, 301, 401, 501, 601, 701, 801, 901, 1001
I notice that every time I skip count by 100, the digit in the hundreds place increases by 1.

July 11
A quadrilateral has 4 sides and 4 angles.
A parallelogram is a quadrilateral in which both pairs of opposite sides are parallel.
A rectangle has 4 sides and 4 right angles. Opposite sides have the same length.
A square has 4 equal sides and 4 right angles.
A trapezoid is a quadrilateral with exactly one pair of parallel sides.

July 12
10 ten-dollar bills equal 1 hundred-dollar bill.
Jen can trade 20 ten-dollar bills for 2 hundred-dollar bills.

July 26
Examples:

I saw the 43 and 57 and added them first, since I know 3 plus 7 equals 10. When I added them 100 was my answer. Then I added 34 and had 134. Then I added 24 and had 158.

I broke up all of the numbers into tens and ones. First, I added the tens. 40 + 30 + 50 + 20 = 140. Then I added the ones. 3 + 4 + 7 + 4 = 18. Then I combined the tens and ones and had 158 as my answer.

I broke up all the numbers into tens and ones. First, I added up the tens. 40 + 30 + 50 + 20. I changed the order of the numbers to make adding easier. I know that 30 plus 20 equals 50 and 50 more equals 100. Then I added the 40 and got 140.

I added up the ones. 3 + 4 + 7 + 4. I changed the order of the numbers to make adding easier. I know that 3 plus 7 equals 10 and 4 plus 4 equals 8. 10 plus 8 equals 18. I then combined my tens and my ones. 140 plus 18 equals 158.