

# Clover School District Summer Math Learning Packet



Students Entering Grade 2

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 1:

- 1. developing understanding of addition, subtraction, and strategies for addition and subtraction within 20
- 2. developing understanding of whole number relationships and place value, including grouping in tens and ones
- 3. developing understanding of linear measurement and measuring lengths as iterating length units
- 4. reasoning about attributes of, and composing and decomposing geometric 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. ©





### Math Tools You Will Need:

Notebook for math journal	Coins	Dice
Pencil	Crayons	Marble
Bottle cap	Play dough	Ruler
Regular deck of playing cards	Bubbles	

### **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 second 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 28, 2022

Today I collected 25 cents. It was easy to count since it was 25 pennies.

### 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.Sumermathtools.weebly.com

https://www.mathplayground.com/ - Thinking Blocks JR

### Math Books to Read:

Alexander, Who Used to be Rich Last Sunday by Judith Viorst

100 Days of School by Trudy Harris

The Button Box by Margarette S. Reid

The Doorbell Rang by Pat Hutchins

98, 99...Ready or Not, Here I Come! by Teddy Slater

Super Sand Castle Saturday by Stuart Murphy

The Coin Counting Book by Rozanne L. Williams

One Cent. Two Cent. Old Cent. New Cent by Bonnie Worth

### **Worksheets to Practice Math:**

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

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

### 1. Compare

Remove the face cards from a deck of cards. Remember an Ace is the same as 1. Pass out all cards in the deck among all of the players. Each player flips over two cards at the same time and finds the sum. The one with the larger sum takes the cards. If the sums are the same, turn over 2 more cards. The player with the largest sum keeps all four cards.

### 2. Tens Go Fish

Remove the face cards from a deck of cards. Deal 5 cards to each player. Each player looks for cards that make 10, and they draw new cards from the deck to replace them. Players take turns asking each other for a card that will make 10 with a card from their hand. A player's turn is over when no more pairs can be made. The game is over when there are no more cards. Both players record their combinations of 10.

### 3. Close to 10

Remove the face cards from a deck of cards. Deal 3 cards to each player. Which two cards brings you closest to 10? Which player is closest to 10? Example: You turn over the cards 5, 4, 3 and your opponent turns over an Ace, 8, and 3. You can make 9 (5 and 4) and your opponent can make 9 (Ace and 8) or 11 (8 and 3). It's a tie since you are both 1 away from 10!

Other games to play: Checkers, Memory, jigsaw puzzles, Parcheesi, Fish, Crazy Eights, Connect Four, Legos, K'Nex, Mancala

### APPs:

### Grades K-2

- Montessori Numbers
- Doodle math: Shapes
- Bugs and Numbers
- Todo Math
- A Number Math App practice basic elementary number facts
- Time to Learn
- Everyday Mathematics, Addition Top it
- Fast Facts Math Addition, Subtraction
- Domino-KIDS-Calculations
- Math Word Problems Addition and Subtraction
- Count Money 2<sup>nd</sup> grade
- Know Your Math Facts
- Number Bond Blasters
- Number Rack
- Dragon Shapes
- Marble Math Jr.

**Number Duel** 

- Cloud Math
- Meteor Math
- eSpark

### **All Grades**

- KENKEN
- Kakooma Addition
- Quick Math Arithmetic & Times Tables
- Pick-a-Path
- Sumdog
- Conundra Math
- Thinking Blocks

### Free Apps used in 1st grade

- Counting Coins
- · First Grade Learning Games
- Pizza Fractions 1
- Telling Time Quiz
- Number Duel
- Number Math Free-Practice Basic Elementary
- Math Slide Tens/Ones
- Math Adventures Lite
- · Cloud Math
- · Meteor Math "Crash"
- Math Facts Express Card Matching Mathematics for Kids
- Ten Frame Fill
- Number Flash

## June 2022 Entering Second Grade Mathematics Calendar

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	June		1 Go on a Shape Hunt around your home. Look for items shaped like a square, rectangle, and a triangle. Draw and label the items.	2 Sort the laundry into categories (owner, color or item type). Make a bar graph and compare the categories. Which has more? How many more? Less?	3 Play <b>Compare.</b> (see directions)	4
5	6 Roll a set of dice and practice addition and subtraction by adding or subtracting the two numbers.	7 Are the equations "true" or "false"? Explain. 3 + 4 + 2 = 4 + 5 5 + 3 = 8 + 1	8 Order this list of numbers from least to greatest: 49 1 7 50 3 22 100 98	9 Read <u>Alexander, Who Used to be Rich Last Sunday</u> by Judith Viorst.  Keep track of how you spend \$1.00.	10 Jump rope and count by tens to 100. Try counting backwards.	11
12	13 Read <u>The Button Box</u> by Margarette Reid.  Find a collection of buttons at home and sort it. Compare how many in each category.	Play a strategy game like Mancala or Connect Four. Plan a strategy to win. Would you use the same strategy the next time you play? Why? Play again with a new strategy.	15 Tell the time that you go to bed to the closest hour or half hour. Draw a picture of the clock's hands for that hour.	16 Blow a marble, a bottle cap and a pencil across a table. Measure using cereal how far they go. Which goes the farthest? By how much?	17 Today's number is 18.  Make 18 by: -Adding two numbers -Subtracting two numbers -Adding three numbers	18
19	20 Try a worksheet from this website: http://gregtangmath.com/	21 Read <u>98. 99Ready or Not.</u> <u>Here I Come!</u> by Teddy Slater.  Play hide and go seek counting backwards from different numbers to 100.	22 Play Close to 10. (see Directions) How does this help you practice addition?	23 How many squares are in this picture?	24 Gather a handful of coins with a value less than \$2.00. Calculate the total.	25
26	27 If you save two cents every day in the month of June, how much money will you have saved at the end of the month?	28 Play a game from this website: http://gregtangmath.com/	29 Read Wolf's Chicken Stew by Keiko Kasza. Find 5 different ways to reach 100. Record each way.	30 Play <b>Tens Go Fish</b> . (See directions)  Add up all the pairs. Who has more? How many more?	We encourage your child to  complete at least 15 n each month,  spend at least 10 min to 5 times a week, pra  use a math journal to her work, and  create a goal to help h stay strong in math or summer.	utes a day, 4 cticing math, record his or nim or her

# July 2022 Entering Second Grade Mathematics Calendar

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday			
• co	<ul> <li>spend at least 10 minutes a day, 4 to 5 times a week, practicing math,</li> <li>use a math journal to record his or her work, and</li> </ul>								
					1 Read <u>Super Sand Castle</u> <u>Saturday</u> by Stuart Murphy.  Make a sand castle and describe the 3-D shapes	2			
3	Write down the time you eat dinner to the nearest half hour for each day this week. Ex. 6:30 or 5:00.	5 Go to the park and draw the shapes you see. Do you see more rectangles than triangles?	6 Read The Doorbell Rang be Pat Hutchins.  Make cookies with your far Can you share them equal How many are left over?	www.funbrain.com and do some math. Record what you did.	8 Play with Bubbles - In one blow, how many bubbles can you make? What are the most bubbles you can blow at one time? How many blows will it take to get to 100?	9			
10	11 How many different ways can you cut a sandwich into fourths? Try it with real or paper sandwiches.	12 Write a story problem to go with 6 + 8.  Now write a subtraction story problem for 14 – 6.	13 Play <b>Tens Go Fish.</b> (See directions)  Add up all the pairs. Who more? How many more?	Ask 10 people their favorite kind of pizza. Record your data in a chart or graph. Compare the results by looking at how many more like one type of pizza.	15 How much do I have if I have 1 quarter, 2 dimes and 1 nickel? Can you show that value with other coins?	16			
17	18 Visit the website www.aplusmath.com and play Hidden Picture in the Game Room.	19 Use these numbers in a story problem:18, 9, 9 Ask an adult to solve your story problem.	20 Go to the library and read about money. Examples: The Coin Counting Book by Rozanne L. Williams One Cent, Two Cent, Old C New Cent by Bonnie Worth	(see directions)	22 50 is the answer. What could the question possibly be? Challenge yourself to think of more questions.	23			
24	25 Solve this problem: If you save two cents every day in the month of July, how much money will you have saved at the end of the month?	26 Play Close to 20.	27 Hold an ice cube in your h Count by 2's until it melts. you count to more or less 100?	Did than 12 inches and 3 things shorter	Ask 5 people their phone numbers. Add the digits of each phone number together. Whose phone number has the highest value?  YOU DID IT! Please bring your journal to your second grade teacher on the first day of school.	30			

### Grade 2 Answer Key - 2022

Answers will vary for many of the activities depending on the choices students make.

Below are the answers for activities with specific solutions.

### June 7

True. We can combine the three and the two on the left to get 5, and then after reordering both sides are 4 + 5.

False. 3 + 5 equals 8, but 8 + 1 equals 9.

### June 8

1 3 7 22 49 50 98 100

### June 17

Examples:

9 + 9 = 18

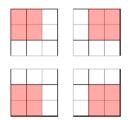
20 - 2 = 18

10 + 4 + 4 = 18

### June 23

The purpose of this task is to give students an opportunity to compose and decompose squares. This is a challenging problem for first graders and can be presented as a brainteaser. It can be useful for giving the students practice in recognizing squares.

In addition to the nine small squares, there are four 2 by 2 squares (shown below), and one 3 by 3 square, for a total of 14 squares.



### June 27

\$0.60 or 60¢

#### June 29

Examples:

20 + 20 + 20 + 20 + 20 = 100

50 + 50 = 100

### July 11

Answers will vary. Each piece must be the same size.

### July 12

Example:

6 + 8 = 14

There were 6 children on the playground and 8 more joined them. How many were there altogether?

14 - 6 = 8

Ramona had 6 balloons and Mark had 14 balloons. How many more balloons did Mark have than Ramona?

### July 15

\$0.50 or 50¢

Some possible answers: 5 dimes; 2 quarters; 10 nickels; 1 dime, 8 nickels

### July 22

Answers will vary. Example: How many pennies equal two quarters?

### July 25

\$0.62 or 62¢