## 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. ©

Each Child, Each Day...Excellence

## 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:

$\checkmark \quad$ Have the date of the entry
$\checkmark$ Have a clear and complete answer
$\checkmark$ 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.htm
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 $2^{\text {nd }}$ grade
- Know Your Math Facts
- Number Bond Blasters
- Number Rack
- Dragon Shapes
- Marble Math Jr.
- Cloud Math
- Meteor Math
- Number Duel
- 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 Fil
- Number Flash



## July 2022 Entering Second Grade Mathematics Calendar

| Sunday | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| We encourage your child to <br> - complete at least 15 math days each month, <br> - spend at least 10 minutes a day, 4 to 5 times a week, practicing math, <br> - use a math journal to record his or her work, and <br> - create a goal to help him or her stay strong in math over the summer. |  |  |  |  |  |  |
|  |  |  |  |  | 1 <br> Read Super Sand Castle Saturday by Stuart Murphy. <br> Make a sand castle and describe the 3-D shapes | 2 |
| 3 | 4 <br> Write down the time you eat dinner to the nearest half hour for each day this week. Ex. 6:30 or 5:00. | 5 <br> Go to the park and draw the shapes you see. Do you see more rectangles than triangles? | 6 <br> Read The Doorbell Rang by Pat Hutchins. <br> Make cookies with your family. Can you share them equally? How many are left over? | $7$ <br> Visit the website www.funbrain.com and do some math. Record what you did. | 8 <br> 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 <br> How many different ways can you cut a sandwich into fourths? Try it with real or paper sandwiches. | 12 <br> Write a story problem to go with $6+8$. <br> Now write a subtraction story problem for 14-6. | 13 <br> Play Tens Go Fish. <br> (See directions) <br> Add up all the pairs. Who has more? How many more? | 14 <br> 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 <br> 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 <br> Visit the website www.aplusmath.com and play Hidden Picture in the Game Room. | 19 <br> Use these numbers in a story problem:18, 9, 9 Ask an adult to solve your story problem. | 20 <br> Go to the library and read books about money. <br> Examples: <br> The Coin Counting Book by Rozanne L. Williams One Cent, Two Cent, Old Cent, New Cent by Bonnie Worth | $21$ <br> Play Compare. (see directions) | 22 <br> 50 is the answer. What could the question possibly be? <br> Challenge yourself to think of more questions. | 23 |
|  | 25 <br> 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? | $\begin{aligned} & 26 \\ & \text { Play Close to } 20 . \end{aligned}$ | 27 <br> Hold an ice cube in your hand. Count by 2's until it melts. Did you count to more or less than 100 ? | 28 <br> Using a ruler, find 3 things longer than 12 inches and 3 things shorter than 12 inches. | 29 <br> Ask 5 people their phone numbers. Add the digits of each phone number together. Whose phone number has the highest value? <br> YOU DID IT! Please bring your journal to your second grade teacher on the first day of school. | 30 |

Clover School District Summer 2022
Adapted from Cambridge Public Schools http://www3.cpsd.us/Math/math summer

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

$\begin{array}{llllllll}1 & 3 & 7 & 22 & 49 & 50 & 98 & 100\end{array}$

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 ${ }^{\text {¢ }}$

## 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 $50 \phi$
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 $62 \phi$

