Beecher Road School

Summer Math Packet

For

Students Entering Second Grade

Dear Second Grader,

Congratulations on successfully completing first grade! In order to help you maintain all the great strategies, skills, and concepts you learned this year and to be ready for second grade, we hope you complete the attached summer packet. The packet has two calendar pages, one for July and one for August. It also includes directions for math games to be played at home as well as cool math books we recommend. We'd like you to try to spend at least ten minutes each day this summer, 4 – 5 days a week, working on the attached problems, reading some of the suggested math books, visiting the websites, or practicing your math facts.

Just a few minutes each day spent "thinking and talking math" will help reinforce the math that you have learned and begin to prepare you for all the new concepts you will learn in second grade. The goal of this packet is for you to have fun while you keep your math skills and concepts fresh. Remember to communicate your mathematical thinking by discussing how you approached a problem, what strategies you used and why, and how you know your solution makes sense.

When you have completed the packet, please sign your name on the slip at the bottom of this paper and ask your parent to sign it, too. Please return the slip to your second grade teacher in August.

Have a safe and happy summer vacation!

_____

Date

I, _____, spent at least 200 minutes working on math activities this summer.

_____   _____

Student Signature   Parent Signature

Grade 2 SUMMER Math Ideas

Math Books To Read:

The Greedy Triangle by Marilyn Burns
Measuring Penny by Loreen Leedy
What Comes is 2s, 3s and 4s? by Suzanne Aker
Math for All Seasons by Tomie dePaola
Fraction Fun by David Adler
A Million Fish, More or Less by Patricia McKissack
How Much is a Million? by David Schwartz
If You Made a Million by David Schwartz
The Grapes of Math by Greg Tang
Math for All Seasons by Greg Tang
The Best of Times by Greg Tang
Shapes That Roll by Karen Nagel
The Button Box by Margarette S. Reid
12 Ways to Get to 11 by Eve Merriam

Games to Play:

Go Fish
Chess
Checkers
Sorry
Connect 4
Qwirkle
Parcheesi
Othello

Books About Perseverance and Mindset:
The Girl Who Never Made Mistakes by Mark Pett and Gary Rubinstein
Making a Splash by Carol E. Reiley
The Most Magnificent Thing by Ashley Spires
Giraffes Can't Dance by Giles Andreae
Your Fantastic Elastic Brain by JoAnn Deak

More Games To Play:

Addition War
Supplies: one deck of playing cards, face cards removed
Number of players: 2
Directions:
1. Divide the cards face down evenly between the players.
2. The first player turns over two cards and says a number sentence that reflects those cards. For example, if the player turns over a 2 and a 3 the player would say, "2 + 3 = 5." That player's sum is 5. The second player turns over two cards and says a number sentence. The player with the higher sum takes all four cards. (Note: ace = 1)
3. War! If the sums of the two players are equal, this is war! Each player places one more card face down and then finds the sum of two more cards placed face up. The player with the higher sum gets all 10 cards.
4. When the original piles are finished, players then use the cards they won to play again. The game is over when one player ends up with all the cards.

Addition War with 3 Cards
Directions:
Begins the same way as Addition War, but each player turns over three cards and says a number sentence that reflects those cards. The player with the higher sum takes all six cards.

Make Ten
Supplies: one deck of playing cards, face cards and 10s removed
Number of players: 2 or more
Directions:
1. Each player chooses five cards from the deck. The remaining cards are stacked in the center.
2. The first player chooses two cards from his or her five cards to make a sum of ten. For example, if the first player has a 4 and a 6 she or he can put those two cards down and say, "4 + 6 = 10". The player then chooses two cards from the center stack. Important: players should always have five cards in their hand.
3. If the first player does not have any cards that make ten he or she can ask another player for a card. For example, if the first player has a 7, the player can ask another player for a 3. If the other player has a 3 that player must give it to the first player. If the other player does not have a 3 then the first player's turn is over. (Note: if the second player gives a card away, she or he should take a card from the middle stack so that she or he still has five cards.)
4. The next player takes a turn and follows the same steps.
5. The game is over when all the cards in the center stack are gone.

Make 20 – works the same way but players try to make combinations adding up to 20. Include the face cards in this game (Jack = 11, Queen = 12, King = 13) and the 10 card. Players will usually need to use at least three cards to make 20.
(e.g. Jack + 7 + 2 = 20).

Two-Digit War
Supplies: one deck of number cards, 0 – 9
Directions:
1. Divide the cards face down evenly between the players.
2. Player 1 turns over two cards and makes the greatest possible two-digit number with those cards. For example, if the player turns over a 2 and a 3 the player would make 32. Player 2 turns over two cards and makes the greatest possible two-digit number with his/her two cards.
3. Players compare numbers. The player with the greatest number wins all the cards.
4. When the original piles are finished, players then use the cards they won to play again. The game is over when one player ends up with all the cards.

Four in a Row

Players begin with two different colors of square inch cubes

To take a turn:
1. Roll two dice
2. Add or subtract the numbers on the dice
3. Find a matching box and cover it using a cube
   If there is no matching box, your turn is over.
4. If the box you cover touches the side of an
   uncovered [die] , cover it.
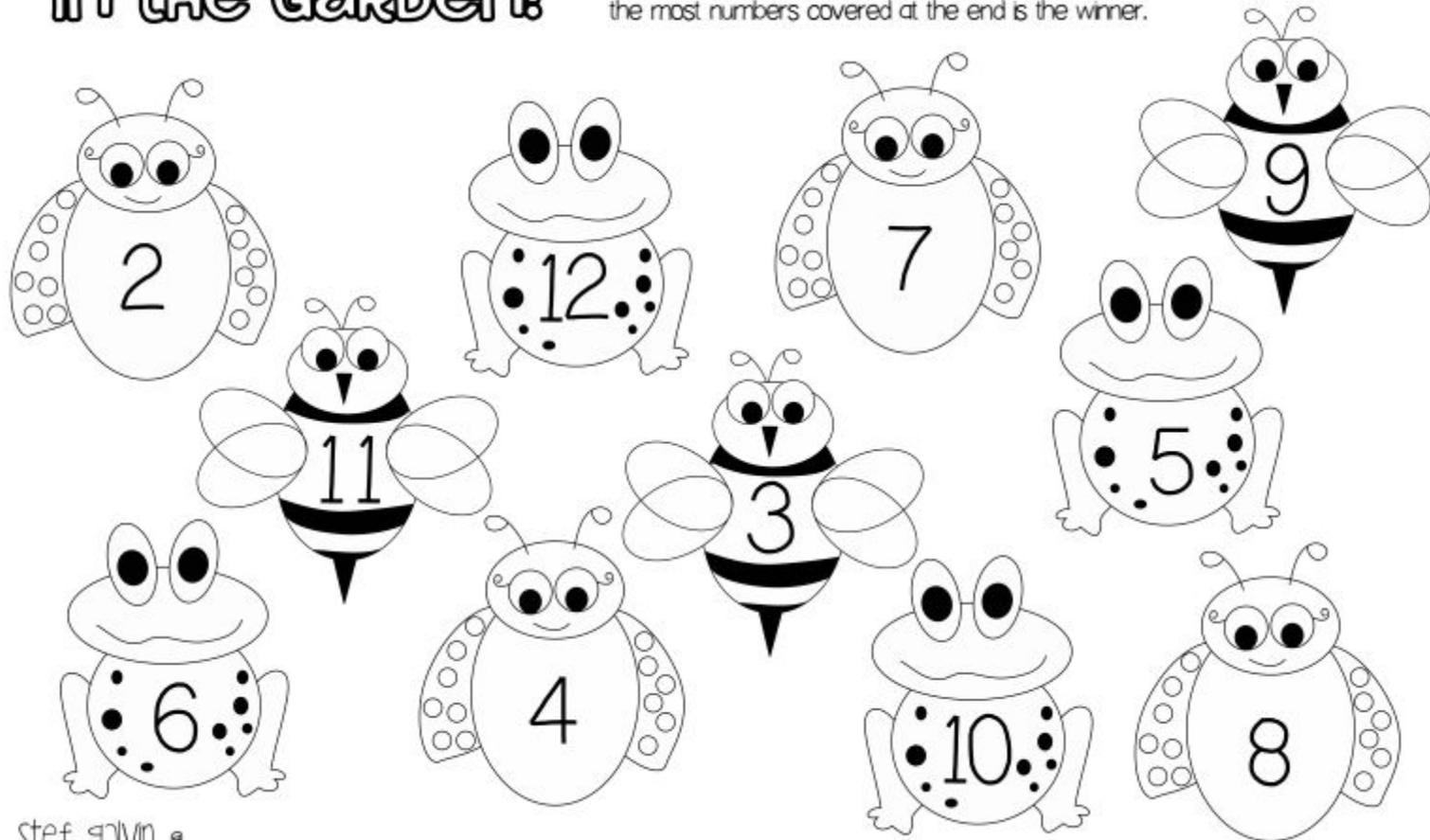
The game is over when a player covers 4 in a row.

	10	8	3	12	5
4	9	2	0	8	
6	1	10		4	5
4	3	12	11	3	1
0		5	6	2	7

BUMP
in the garden!

Materials Needed: 2 dice, game board, 2 sets of counters (1 per player)

How to play: Roll the dice and add the numbers together. Cover the number on the game board. If another player's counter is there, BUMP it off! If your counter is there already, stack it up and freeze the number. The player with the most numbers covered at the end is the winner.

2

12

7

9

11

3

5

6

4

10

8

stef galvin

Entering 2nd Grade
July 2018

Ask five people their phone number. Add up all the digits in each number. Whose number is worth the most? Whose number is worth the least?	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?	Count forward by tens starting at 8. Stop at 98. Count forward by tens starting at 26. Stop after you've said ten numbers. What number did you say last?	You won first place at a contest! You have two choices for the prize. You can take $10 home with you today OR $2 a day for the next 8 days. Which option earns more money? How much more?	Play "Addition War"
Solve the following riddle. Use the clues to figure out the 2-digit mystery number: My favorite number is between 41 and 49. It is an odd number. The digit in the ones place is greater than 5.	What is today's date? What was the date two weeks ago? What will the date be ten days from now?	Stand and jump as far as you can. Measure using a yardstick or meter stick. Jump 3 times and compare your measurements.	Find five things that are shorter than 12 inches and five things that are longer than 12 inches. Draw them all on a piece of paper and label the inches.	Play "Make Ten"
Solve the following riddle. Use the clues to figure out the 2-digit mystery number: It is less than 50 and greater than 30. It is an even number. The digit in the one's place is two more than the digit in the ten's place.	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.	What time do you get up in the morning? What time do you eat lunch? What time do you go to bed? Draw a picture of the clock to the nearest hour or the nearest half hour for each time.	Write all the equations that make ten. Be sure to include the "switcheroos"!	Play "Bump in the Garden"
Complete "Today's Target" for the number 10.	Cut out a picture from a magazine or newspaper. Glue it to a piece of paper. Write a math story problem to go along with the picture. Challenge a friend to solve it!	Play a strategy game like Othello or Checkers Did your strategy work? Will you try a different strategy the next time you play?	How many times can you hop on your left foot in a minute? How about your right foot? Compare the number of hops using the symbols <, > or =. What is the difference?	Play "Four in a Row"

Entering 2nd Grade
August 2018

Fill in the 100 chart (attached). Circle all the numbers that you say when you start at zero and count by fives.	Read *The Greedy Triangle*, by Marilyn Burns. Then, go on a shape hunt for quadrilaterals (4-sided figures). How many can you find? How are their attributes the same or different?	Use a calendar to figure out how many days are left until the first day of school. How many are there?	Go on a Treasure Hunt in your house to find different 3-dimensional shapes. Group them by attributes. Which shape did you find most often?	Play "Two-Digit War"
Read *Math for All Seasons* by Greg Tang. Make up your own math riddle.	Count backward by tens starting at 99. Stop after you've said five numbers. What number did you say last? Count backward by tens starting at 165. Stop after you've said ten numbers. What number did you say last?	Complete a page from the Snappy Maths website.	Write down the ages of everyone in your family. Put them in order from least to greatest.	Play "Addition War with 3 Cards"
What is today's date? What was the date two weeks ago? What will the date be ten days from now?	Say all your doubles facts from 1 + 1 through 10 + 10. Do you know them all?	Solve the following riddle. Use the clues to figure out the two-digit mystery number: It is greater than 67 and less than 100. The digits in the one's place and the ten's place are the same. It is an even number.	Play a strategy game like Othello or Checkers Did your strategy work? Will you try a different strategy the next time you play?	Play "Make 20"
Find out the birthdays of five different people. Write the numbers in order from least to greatest. (For example, if your birthday is July 28 you would use the number 28.)	Write a story problem that can be solved with this equation: $13 - 7 = 6$	Fill in the missing numbers from the 100 Chart Cut-Outs (attached). What strategies did you use?	Write all the equations for this fact family: 5 6 11	Play "Stop the Clock 1" from the Oswego School District website

Today's Target

Today's Target Number is **10**

Try to make the target by

1. adding two different numbers   _____

2. subtracting two numbers   _____

3. adding three numbers   _____

4. adding and subtracting   _____

5. starting with a number greater than 20   _____

6. using all even numbers   _____

7. adding four numbers   _____

Today's Target

Today's Target Number is ☐ **8**

Try to make the target by

1. adding two different numbers   _____

2. subtracting two numbers   _____

3. adding three numbers   _____

4. adding and subtracting   _____

5. starting with a number greater than 10   _____

6. using all even numbers   _____

7. adding four numbers   _____

100 Chart

1	2	3	4	5	6	7	8	9	10
11	12	13		15	16	17	18	19	20
21	22	23		25	26	27	28	29	30
31						37	38	39	40
41	42	43		45	46	47	48	49	50
51	52	53		55	56	57	58	59	60
61	62	63	64	65	66	67			70
71	72	73	74	75	76			79	80
81	82	83	84	85			88	89	90
91	92	93	94			97	98	99	100

100 Chart Cut-Outs

7	
	18

57		

	36

| 53 | |

| 43 | 26 |