



Summer Math Learning Packet

Students Entering Grade 2



Purpose

It is important for all students to review math concepts, skills, and practices during the summer. Students should continue to develop their conceptual understanding, their procedural skill and fluency, and their ability to apply both of these to solve problems. Intentional practice of math skills, concepts, and practices will help students reinforce this year's learning as well as help to prepare them for the upcoming year. The activities included here can serve as a way to engage your family in fun and challenging conversations around math over the course of the summer.

Directions

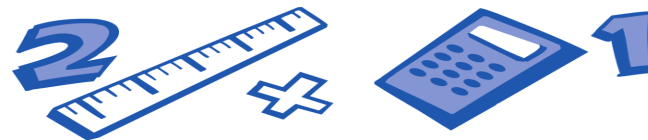
The calendar does not need to be returned in the fall, but we hope you complete many of the activities and use them to develop and explore your own ideas!

Mathematical Practices:

- Make sense of problems and persevere in solving them.
- Reason abstractly and quantitatively.
- Construct viable arguments and critique the reasoning of others.
- Model with mathematics.
- Use appropriate tools strategically.
- Attend to precision.
- Look for and make use of structure.
- Look for and express regularity in repeated reasoning.

What parents/guardians can do to support your child:

- ✓ Make a practice plan and help your child set goals.
- ✓ Recognize your child's strengths.
- ✓ Help your child to identify the areas of mathematics he/she would like to focus on over the summer.
- ✓ Have fun solving problems together and creating your own new math challenges.
- ✓ Create a system with your child to monitor and track progress.



Math Tools You May Need:

Blank paper or a journal for problem-solving and creating, ruler (<http://printable-ruler.net/>), pencils, colored pencils or crayons, dice, scissors, internet access, calculator

Websites to Explore:

www.funbrain.com

www.amathsdictionaryforkids.com

illuminations.nctm.org

www.mathsisfun.com

www.aplusmath.com

www.aaamath.com

www.mathplayground.com

www.setgame.com

www.thatquiz.com

www.xtramath.org

www.mathchimp.com

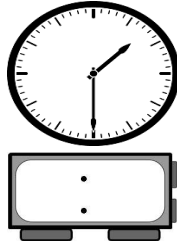

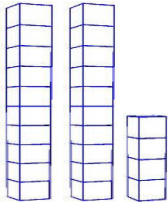
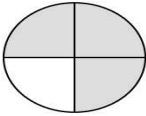
www.arcademics.com/games

resources.oswego.org/games/

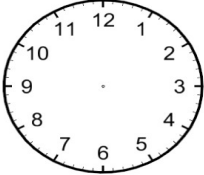


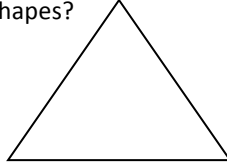
www.math-play.com/

Guilford Public Schools Summer Math Activities— Entering Second Grade

Are you ready to keep your math skills sharp for second grade?! The July and August calendars below are suggested activities for families and children to do together. The purpose for the activities is to have fun with math while getting ready for the next school year. The calendar does not need to be returned in the fall, but we hope you complete many of the activities and use them to develop and explore your own ideas!

<p>JULY</p> <p>What to use? Name the measurement tool or units used to:</p> <ul style="list-style-type: none"> • Measure your bed ____ • Weigh a baby ____ • Measure a book ____ • Measure temperature ____ 	<p>Tell an adult an addition story problem to go with $4 + 8$. Now tell a subtraction story problem for $12 - 4$.</p>	<p>Write the number 15 two different ways:</p> <p>_____ + _____ = 15</p> <p>15 = ____ tens ____ ones</p> <p>How many other ways can you make 15?</p>	<p>Practice your addition and subtraction facts through sums of 20:</p> <ul style="list-style-type: none"> * Use playing cards * Use flash cards * Web: www.xtramath.org 	<p>What number comes after 16? What number comes before 30? What numbers come before and after 57?</p>
<p>Solve using $>$, $<$, $=$</p> <p>59 ____ 75 82 ____ $80 + 2$ 99 ____ $100 - 1$ $24 - 4$ ____ $17 + 2$</p>	<p>I am 7 years old and my sister is 11. Who is younger? How much younger?</p> <p>I have 16 stickers and my sister has 9. Who has more? How many more?</p>	<p>A student said, "I solved $2 + 6 + 4$ by adding $6 + 4$ and then adding 2 to the sum of 10."</p> <p>Is her strategy correct? Explain.</p> <p>How would you solve $5 + 7 + 3$?</p>	<div style="text-align: center;">  <p>TIME?</p> </div>	<p>Go to illuminations.nctm.org Click the box next to Interactives Search for: Ten Frame and play the game.</p> <p>How many number sentences can you make with the sum of 10?</p>
<p>How many books do you have? Make an estimate. Then count them. How close was your estimate?</p> <div style="text-align: center;">  </div>	<p>Skip count to 100 by 5s, 10s. Skip count to 50 by 2s. Record how long it took each time. Which took longer?</p>	<p>Hiding Game (partner game) Get 10 pennies. Put some pennies in one hand and the rest in your other hand. Open one hand and have your partner figure out what's hiding in the other hand.</p>	<p>Make a list of 2D and 3D shapes. Go on a scavenger hunt to look for those shapes. Bring your list and check them off as you find them.</p>	<p>Count backwards by 10s beginning with 120 and go back to 40. Record your numbers.</p> <p>Count backwards by 10s beginning with 87 and go back to 17. Record your numbers.</p>
<p>Solve for missing addend.</p> <p>_____ + 8 = 11 $6 +$ _____ = 13 $9 =$ _____ + 2 _____ + 5 = 15</p>	<div style="text-align: center;">  <p>Value? _____</p> </div>	<p>What part of the circle is shaded in words?</p> <div style="text-align: center;">  <p>_____</p> </div>	<p>Go to illuminations.nctm.org Click the box next to Interactives Search for: Grouping and Grazing and play the game.</p>	<p>7+7 7+8 8+8 8+9 9+9 9+10</p> <p>What clues help you solve these problems?</p>

AUGUST

 <p>Show 12:30 on the clock.</p>	<p>Make a 3-D shape using mini marshmallows or playdough and toothpicks. How many corners does your shape have? How many edges?</p>	<p>The numbers in my fact family are 9, 3, and 12. What are the two addition and two subtraction number sentences you can make using these numbers?</p>	<p>Write as many number sentences as you can that have 14 for an answer.</p>	<p>Go to illuminations.nctm.org Click the box next to Interactives Search for: Concentration and play the game with numbers 1-10.</p> <p>Record your matches by writing the digits with the words or pictures to match.</p>
<p>If I see 8 people, how many eyes can I see?</p> <p>If there are 30 toes under the table, how many people are sitting at the table?</p>	<p>Use these numbers in a story problem: 18, 9, 9. Write your own problem for a friend or relative to solve.</p>	<p>Cut out grocery coupons that your family might use. Sort the coupons into different categories. What category has the most? The least?</p>	<p>Sit outside for 15 minutes. Make a tally chart of the number of birds, trees, bees and flowers you see.</p>  <p>Tally = II</p>	<p>Read carefully before answering: I had 4 shells, I got 5 more. I got 2 more. I lost 4.</p> <p>How many do I have now?</p>
<p>Show how to solve $36 + 10$ using drawings of base ten blocks.</p>	<p>Roll 2 dice together and add to find the sum. Write each sum down. Roll the dice 20 times. What sum did you get the most often? Which sum was least?</p> 	<p>Combine 2 equal triangles to make a diamond. What other shapes can you make by combining shapes?</p> 	<p>List all the words you can think of about MATH. Can you think of 10 or more?</p>	<p>Work math problems on the sidewalk with a paint brush and water.</p>
<p>Find these things in the newspaper or online: price of something to eat, a phone number and a score for a baseball game.</p>	<p>Write the doubles facts (example: $3 + 3$, $6 + 6$) to 20. Say them from memory.</p>	<p>Practice your addition and subtraction facts through sums of 20:</p> <ul style="list-style-type: none"> * Use playing cards * Use flash cards * Web: www.xtramath.org 	<p>Show how to find the sum of $26 + 30$ using base ten blocks.</p>	<p>How many different ways can you cut a sandwich into 4 equal pieces?</p> <p>Try this with real or paper sandwiches. Record your findings with drawings and words.</p>