



## Get ready for Second Grade!

In Grade 1, instructional time in math focused on four critical areas:

### **Critical Area One**

Develop understanding of reasoning about attributes of and composing and decomposing geometric shapes

### **Critical Area Two**

Develop understanding of whole number relationships and place value for 10's and 1's

### **Critical Area Three**

Develop understanding of linear measurements and measuring lengths as iterating units of length

### **Critical Area Four**

Develop understanding of reasoning about attributes of and composing and decomposing geometric shapes

The following 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 math" will help reinforce the math that has been learned and begin to bridge the foundation for extending to the 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, discuss the math concept being reinforced.

Sun	Monday	Tuesday	Wednesday	Thursday	Friday	Sat.
.	<b>1</b> Write down all of the doubles you know. ( $2+2=4$ , $8+8=16$ , etc.) Try and learn two more if you don't know all of them 0 to 10.	<b>2.</b> How many squares are in a 4 by 4 square? What equation could you write for this?	<b>3</b> If Mary has 18 cents and Jacob has 2 cents, how much money do they have together? What is another way to make 20 cents? (15 and 5, etc.) Record your thinking.	<b>4</b> 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? Draw a picture or equation to show your thinking.	<b>5</b> Add 10 to the following numbers. (18, 37, 40, 79) What do you notice? What changes? The ones or tens? Show your work.	6
7	<b>8</b> Find 5 different ways to reach 100. Record each way. Remember you can use adding or subtracting.	<b>9.</b> Start with the following numbers: 24, 66, 11, 30, and count by 10's to 100. Record your answers for each number. For example if I started with 72-72, 82, 92, 102	<b>10</b> Go on a Shape Hunt around your home. Look for items shaped like a square, rectangle, and a triangle. Draw and label the items. These are all 2D shapes. Do you remember any 3D shapes? Hint: a cylinder is one of them but there are more!	<b>11.</b> Sort the laundry into categories (owner, color, item type (pants/shirt). Make a bar graph and compare the categories. If by owner: Who has more clothes? Who has less? If by color: Who has more ___ colored clothes? Etc. Record your graph	<b>12</b> Terique has 57 video games and his friend has 10 less video games than Terique. How many video games does his friend have? Show your work and write an equation. What if his friend had 10 more?	13
14	<b>15</b> Roll two dice and practice addition and subtraction by adding or subtracting the two numbers. If you don't have dice, have an adult give you two numbers at a time to add or subtract! Show work.	<b>16</b> Are the equations "true" or "false"? Explain. Work them out to be sure! $3+4+2=4+5$ $5+3=8+1$ Can you think of your own?	<b>17</b> List of numbers: 1 5 10 50 100 . Add the numbers below to the group above so all numbers will be listed in order from least to greatest. 49, 7, 22, 98, and 3 For example put the 3 after the 1	<b>18.</b> Write the number made by the tens and ones listed: 2 tens and 3 ones = 23 5 ones and 8 tens; 1 ten and 0 ones; 3 tens and 3 ones -Can you make your own number?	<b>19.</b> Jump rope and count by tens to 100. Try counting backwards. If you don't have a jump rope, just hop or jump and count by 10's. Can you count backwards by 10s from 100?	20
21	<b>22</b> Do the following equations. Can you do them on a number line? $40 + 80 =$ $30 + 50 =$ $23 + 60 =$ Record your work.	<b>23</b> I went to the park and I saw 18 rabbits playing in the grass. When I came back from lunch I only saw 10 rabbits. How many left while I ate lunch? Show your thinking with pictures and an equation.	<b>24</b> 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. Can you draw it on a digital and analog clock?	<b>25</b> Blow a marble, a bottle cap and a pencil across a table or 3 similar objects. Measure using inches, cm, or pennies how far they go. Which goes the farthest? By how much? Why do you think they went different distances?	<b>26</b> Today's number is 18 Make 18 by: -Adding two numbers - -Subtracting two numbers - -Adding three numbers Record your thinking. Now try it with the number 40.	27
28	<b>29</b> Jahniya has 7 dolls, 20 necklaces, and 12 games. How many things does she have in all? Show your work.	<b>30.</b> 50 is the answer. What could the question be? Come up with 4 more equations. For example: $60-10=50$				

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			<p><b>1</b> Jason has 75 red and blue fish. If 20 are red how many are blue? Show your work with an equation and pictures.</p>	<p><b>2</b> Hold an ice cube in your hand. If it's too cold lay it on the sidewalk or a plate. Count by 2's until it melts. Did you count to more or less than 100? Why did it melt?</p>	<p><b>3</b> Using a ruler, find 3 things longer than 12 inches and 3 things shorter than 12 inches. If you don't have a ruler. Find a shoe and use that...find 3 things longer than the shoe and 3 things shorter than the shoe.</p>	<b>4</b>
<b>5</b>	<p><b>6</b> Ask 5 people their phone numbers. Add the digits of each phone number together. Whose phone number has the highest value? Show your work.</p>	<p><b>7</b> Number of the day 78 -add ten -subtract ten -how many ones? tens? - Make 78 by adding 2 numbers -Make 78 by subtracting 2 numbers (Show work)</p>	<p><b>8</b> Some 3D shapes are cylinders, cubes, spheres, cones, and pyramids. Use play-dough, dirt, sticks, paper, etc. to make one or more of the shapes. Write about what you did.</p>	<p><b>9</b> Write down the time you eat dinner to the nearest half hour for each day this week. 6:30 or 5:00. Draw the time on an analog AND digital clock. What day did you eat the earliest? latest? Record your work!</p>	<p><b>10</b> Go to the park or outside and draw the shapes you see. Do you see more rectangles than triangles? What are the attributes of triangles and rectangles? (how many sides, corners, etc.) Record your work.</p>	<b>11</b>
<b>12</b>	<p><b>13</b> If you bake 30 cookies and you want to give 10 cookies to each one of your friends, how many friends could you give 10 cookies to? Draw a picture to help you figure it out or make some cookies and try it!</p>	<p><b>14</b> Start at your front door and walk to the stove. Record how many steps it took. Start at your front door and walk to the bathroom and record how many steps it took. Which took more? How much more? (Try giant steps) Record your thinking</p>	<p><b>15.</b> Jason mows lawns for money. He gets \$5 for each yard he mows. If he mows 6 yards how much money would he have? What if he got \$10 for each yard? Draw a picture to help you!</p>	<p><b>16</b> How many different ways can you cut a sandwich into fourths? Try it with real or paper sandwiches. Record your work with drawings!</p>	<p><b>17</b> Write a story problem to go with <math>6 + 8</math>. Now write a subtraction problem for <math>14 - 6</math>. Draw pictures to go with both!</p>	<b>18</b>
<b>19</b>	<p><b>20.</b> Circle the number that is greater out of each pair. How do you know? 78 or 87 32 or 12 50 or 5 87 or 54 Record your work</p>	<p><b>21.</b> Ask 10 people their favorite food. Record your data in a chart or graph. Compare the results by looking at your data. Did anyone like the same foods? more or less of a food than another?</p>	<p><b>22</b> How much do I have if I have 1 quarter, 2 dimes and 1 nickel? Can you show that same value with other coins? Draw a picture to help you!</p>	<p><b>23</b> Use a number line to record how you would count by 10's from 55 to 95. Remember your 1<sup>st</sup> number should be 55 not 0 or 1. © Show your work.</p>	<p><b>24</b> Use these numbers in a story problem: 18, 9, 9 Ask an adult to solve your story problem. Remember you can add, subtract, or both! Record your work!</p>	<b>25</b>
<b>26</b>	<p><b>27</b> Read a book about math.</p>	<p><b>28</b> Make up a challenge word problem for your mom, dad, sister, brother, neighbor, or friend!</p>	<p><b>29</b> Annie collects marbles. She has 5 pink marbles, 4 red marbles and 6 green marbles. How many marbles does she have in all?</p>	<p><b>30.</b> 7 children watch a parade. Then 4 children walk away. How many children are still watching the parade?</p>	<p><b>31</b> 4 children ride bikes. Then 2 more children join them. How many children are riding bikes now?</p>	

## **Second Grade Math Literature:**

Adams, Barbara Johnston. *The Go-Around Dollar*.

Axelrod, Amy. *Pigs Will Be Pigs*.

Barabas, Kathy. *Let's Find Out About Money*.

Baer, Edith. *This Is The Way We Go To School*.

Burns, Marilyn. *The Greedy Triangle*. Burningham, John. *Would You Rather?*

Clement, Rod. *Counting on Frank*.

Crampton, William G. *Flag*. Eyewitness Guides.

Cribb, Joe. *Money*. Eyewitness Guides.

Cristaldi, Kathryn. *Even Steven and Odd Todd*.

DeRubertis, Barbara. *A Collection for Kate*.

DeRubertis, Barbara. *Count on Pablo*. (Math Matters Series.)

DeRubertis, Barbara. *Deena's Lucky Penny*. (Math Matters Series.)

Emberley, Ed. *Ed Emberley's Picture Pie: A Circle Drawing Book*.

Friedman, Aileen. *A Cloak for the Dreamer*.

Friedman, Aileen. *The King's Commissioners*.

Giganti, Paul Jr. *How Many Snails?*

Grossman, Bill. *My Little Sister Ate One Hare*.

Hamm, Diane Johnson. *How Many Feet in the Bed?*

Harper, Dan. *Telling Time with Big Mama Cat*. Haskins, Jim. *Count Your Way Through Japan*.

Hoban, Tana. *26 Letters and 99 Cents*.

Hoban, Tana. *Shapes, Shapes, Shapes*.

Holtzman, Caren. *A Quarter from the Tooth Fairy*.

Hong, Lily Toy. *Two of Everything*.

Hulme, Joy N. *Sea Sums*.

Hutchins, Pat. *Clocks and More Clocks*.

Hutchins, Pat. *The Doorbell Rang*.

Jenkins, Steve. *Biggest, Strongest, Fastest*.

Jocelyn, Marthe. *Hannah's Collection*.

Jonas, Ann. *Splash*.

Jones, Carol. *What's the Time, Mr. Wolf*

Kaczman, James. *When a Line Bends...A Shape Begins*.

Kassirer, Sue. *What's Next, Nina?* (Math Matters Series.)

Keenan, Sheila. *What Time Is It?*  
Leedy, Loreen. *Fraction Action*.  
Leedy, Loreen. *Measuring Penny*.  
Lionni, Leo. *Inch by Inch*.  
Llewellyn, Claire. *My First Book of Time*.  
Long, Lynette. *Domino Addition*.  
Mahy, Margaret. *17 Kings and 42 Elephants*.  
McMillan, Bruce. *Eating Fractions*.  
Merriam, Eve. *12 Ways to Get to 11*.  
Murphy, Stuart J. *Beep Beep, Vroom Vroom*.  
Murphy, Stuart J. *The Best Vacation Ever*.  
Murphy, Stuart J. *A Fair Bear Share*.  
Murphy, Stuart J. *Let's Fly a Kite*. (Math Start Series.)  
Murphy, Stuart J. *Game Time!*  
Murphy, Stuart J. *Give Me Half!*  
Murphy, Stuart J. *The Penny Pot*.  
Murphy, Stuart J. *Super Sand Castle Saturday*.  
Myller, Rolf. *How Big Is a Foot?*  
Neuschwander, Cindy. *Sir Cumference and the First Round Table*.  
Ochiltree, Dianne. *Bart's Amazing Charts*.  
Penner, Lucille Recht. *Clean-Sweep Campers*. (Math Matters Series.)  
Pinczes, Elinor J. *One Hundred Hungry Ants*.  
Pittman, Helena Clare. *Counting Jennie*.  
Pluckrose, Henry. *Math Counts: Length*.  
Pluckrose, Henry. *Math Counts: Shape*.  
Pluckrose, Henry. *Math Counts: Time*.  
Richards, Kitty. *It's About Time, Max!* (Math Matters Series.)  
Rocklin, Joanne. *The Case of the Missing Birthday Party*. (OUT OF PRINT)  
Rockwell, Anne F. *100 Days of School*.  
Schlein, Miriam. *More Than One*.  
Schultz, Charles M. *How to Draw Peanuts*.  
Schwartz, David M. *If You Hopped Like a Frog*.  
Singer, Marilyn. *Nine O'Clock Lullaby*.

Sloat, Teri. *From One to One Hundred*.

Sturges, Philemon. *Ten Flashing Fireflies*.

Tang, Greg. *The Grapes of Math*.

Tang, Greg. *Math-terpieces*.

Viorst, Judith. *Alexander Who Used to Be Rich Last Sunday*.

Walton, Rick. *Bunny Day: Telling Time From Breakfast to Bedtime*.

Watts, Barrie. *How They Grow Series*.

Wiesner, David. *Tuesday*.

Williams, Rozanne Lanczak. *The Coin Counting Book*.

Zimelman, Nathan. *How the Second Grade Got \$8,205.50 to Visit the Statue of Liberty*.