

Dear Rising 6th Graders,

Name: _____

The 6th grade math teachers are looking forward to teaching you next year! We LOVE math, and we know we can help you grow into even stronger mathematicians than you are now! We all have strengths and weaknesses, and struggle is a very important part of the learning process. When you struggle, be encouraged, since the struggle means you are learning and growing. To best be prepared, and minimize struggles in the fall, keep your math skills sharp over the summer!

In addition to the assignments below, we recommend you spend time playing math games as well. Focus on knowing each of your **multiplication facts** from 0x0 to 12x12 in three seconds or less! Also practice all operations with fractions and decimals. Being strong in these areas will make 6th grade math much easier for you. Some links for fun games to help you review math are included below. The public libraries have computers with internet access if you do not have internet at home or on a mobile device.

*NO calculators are used in 6th grade. Therefore all work on the summer packet must be calculated by hand. **All work** should be shown and turned in with final answers to receive credit.



Included in this packet:

Math Review Internet game sites/App list- **Suggested for all students**

Pantry Scavenger Hunt-TIC TAC TOE- **Required for all students**

Review Questions- **Required for all students**

Suggested Math Review websites and free apps

Websites

coolmath.com brainpop.com mathplayground.com funbrain.com
ixl.com lauramagner.com (click on the 6th grade tab) aplusmath.com
hoodamath.com khanacademy.com learnzillion.com

Apps

2048 Math Central Mental Math Free

TIC TAC TOE Instructions: Select **three in a row**--just like you have to do to win tic-tac-toe. Highlight or circle your choices. Complete the three activities. Be sure to **show all your work** and turn it in with this page.

Of course, you can always do MORE than three activities!

Pantry Scavenger Hunt TIC TAC TOE

<p>Hungry? What if you ate a whole box of cereal by yourself? Find a box in your pantry. Write down the name of it. How many calories are in one serving? How many servings are included in the box? Multiply the calories and the servings to find the total number of calories in the box!</p>	<p>In a variety pack of Poptarts™, two of 12 tarts are blueberry. In two boxes of 12, how many would be blueberry, if the ratio stays proportional? Make a table of equivalent ratios to show the number of blueberry tarts to total tarts for 2, 3, 4, 5, and 6 boxes of Poptarts.</p>	<p>Out of 1,000 popcorn kernels in a microwave pack, 40 did not pop. Write a fraction showing the number of un-popped kernels. What percent of the kernels <i>didn't</i> pop? What percent <i>did</i> pop?</p>
<p>You'll need a tape measure or yard stick. Make a prediction about how far a can turned on its side will roll? Does the type of floor matter? Using a can from your pantry, pick a starting point and roll the can. Measure how far it rolled. Now choose a different starting point on a different kind of floor. Roll and measure again. What is the difference in the two distances?</p>	<p>Pasta, cereal, and cracker boxes are all rectangular prisms. To find the Volume of the box, multiply the width x length x height. Measure the three dimensions (3D!) of a box from your pantry. Find the total Volume. Use cm or in. Be sure to express your answer in cubic units (cm³ or in³).</p>	<p>Granola bars come six to a box and fruit bars come eight to a box. How many boxes of each would be needed to give 60 people one of each kind of snack? Show your solution. Can you solve it in another way?</p>
<p>A giant box of Goldfish™ crackers contains 2,912 little crackers! If 14 friends split the snack evenly, how many crackers would each person get? Use the standard algorithm to divide. Are there any crackers left over?</p>	<p>Salty! Salt in our food is reported as sodium. How salty is your favorite snack or crackers? Look in your pantry and find some crackers or other crunchy snack. What did you pick? Look on the nutrition label and find the listed sodium. Multiply the mg of sodium times the number of servings per box. That will be the total sodium for the entire box of snacks!</p>	<p>Look in your pantry for things that come in sets for one price. (Applesauce or pudding cups, oatmeal packets, soda etc.) Tell what item you pick. Ask your parents how much it costs. Find the unit rate (individual cost) for each cup or packet. For example, if a 6-pk of pudding was \$1.89, how much was each individual cup of pudding?</p>

REQUIRED Activities

Number Sense

Make a chart, graph, or table for the numbers 1-100. For each number, tell **ALL the factors of the number**. Then, tell if the number is **prime** or **composite**.

For example:

12: 1, 2, 3, 4, 6, 12 Twelve is a composite number.

Solve

$$\begin{array}{r} 965 \\ \times 65 \\ \hline \end{array}$$

$$\begin{array}{r} 599 \\ \times 82 \\ \hline \end{array}$$

$$\begin{array}{r} 711 \\ \times 13 \\ \hline \end{array}$$

$$\begin{array}{r} 272 \\ \times 67 \\ \hline \end{array}$$

$$\begin{array}{r} 616 \\ \times 47 \\ \hline \end{array}$$

$$\begin{array}{r} 118 \\ \times 34 \\ \hline \end{array}$$

$$\begin{array}{r} 429 \\ \times 95 \\ \hline \end{array}$$

$$\begin{array}{r} 547 \\ \times 59 \\ \hline \end{array}$$

$$65 \overline{)4394}$$

$$82 \overline{)5163}$$

$$76 \overline{)3648}$$

EXEMPLAR: Write an organized, edited paragraph to explain your solution to the following problem.

We have a lot of students at Lilburn Middle School! And that means a lot of people at lunch! Each carton of milk at school is a half pint, which is 8 ounces. If there are 1200 students in the school that get milk each day, how many *equivalent* gallons of milk is that each day? (You may need to remember the “Big G” for liquid measurements!) Show your calculations and write about how you found your answer.