

Resources and Ideas for Families

WELCOME!

This newsletter is sent home to families every nine weeks. It provides information on what your child is learning in math, activities you can do at home to reinforce the content, and suggestions for books and resources you can use to help your child learn math.

BUILDING A MATHEMATICAL COMMUNITY

Students will develop a problem solving protocol that will be posted in their math classroom.

Step 1: Read the question/prompt and quietly think on your own. No Pencils.

Step 2: Talk about the problem with your teammates. What is your plan to solve? Choose your strategy.

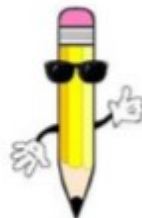
Step 3: Solve the problem.

Step 4: Discuss results.



PROBLEM SOLVING STRATEGIES

1. Draw a picture
2. Make a chart or list
3. Guess and Check
4. Use a formula
5. Look for a pattern
6. Work Backwards
7. Write a Number Sentence
8. Logical Reasoning



MATH IS FUN!

Check out the **MATH IS FUN** website which contains resources to help children learn math. Here you will find "How to Videos", Online Games, Vocabulary, and APPs related to the content your child is learning.



www.jcpsmath.weebly.com

During the 4th nine weeks, third graders learn to:

- **Solve real world problems by multiplying side lengths to find the area of rectangles.** For example, a rectangular picture has an area of 18 cm. What could be the length and width of the picture?
- **Solve real world problems by showing how rectangles with the same perimeter can have different areas and showing how rectangles with the same area can have different perimeters.** For example, find two possible perimeters for a dog pen that has an area of 24 square feet.
- **Fluently multiply and divide within 100.** Third graders are still working on memorizing basic multiplication and division facts. They should know all facts of single-digit factors to 100.
- **Fluently add and subtract within 1000 using my strategies.**
- **Solve multiplication and division word problems within 100 and represent using drawings and equations with a symbol for the unknown.** For example, it takes 8 apples to make a pie. How many pies can be made from 56 apples?
- **Measure and estimate liquid volume using liters.** For example, a student could measure a liquid volume by using a measuring cup marked off in milliliters.
- **Measure and estimate masses of objects using grams and kilograms.** For example, a student could look at a scale to measure the mass of an object using grams or kilograms. Students also need to understand how big a gram or a kilogram is. A medium-sized paper clip or a dollar bill are examples of two household objects that weigh a gram. A hairdryer and a whole pineapple are two objects that weigh about a kilogram (2.2 lbs).

Activities to Try at Home:

- Practice creating rectangles with different areas by using dice. Roll two dice and multiply the numbers together. Draw a rectangle that has an equal area to the product you rolled. For example, if a player rolls a 4 and a 6, he would create a rectangle that has an area of 24. What is the perimeter? Now create a new rectangle with an area of 24 and a different perimeter.
- Practice adding and subtracting three-digit numbers using dice. The first player rolls three dice and records the 3-digit number rolled. She then rolls again and adds the numbers together. The second player can then roll and whoever gets the highest sum wins the round. For a variation, subtract the numbers making sure to put the greatest number first.
- Cooking is a practical and easy way for children to learn how to measure liquid volume. Allow your child to help you prepare dinner and share with her the ways you measure liquids as you cook.
- Discuss with your child situations in which you have used perimeter or area in your everyday life so that he can see the real world applications.

Check Out These Books!

Below are some suggested books which connect to math content students are learning this cycle.

- ***Perimeter, Area, and Volume: A Monster of Book Dimensions*** by David Adler
- ***Perimeter*** by Minta Berry
- ***Area*** by Marsha Arvoy and Dorianne Nardi
- ***How Full is Full? Measuring Bodies of Water*** by Victoria Parker
- ***Mass and Weight*** by Barbara Somervill



MATH TASK

Finding the Unknown

Illustrative Mathematics

Tehya and Kenneth are trying to figure out which number could be placed in the box to make this equation true. Tehya insists that 12 is the only number that will make this equation true. Kenneth insists that 3 is the only number that will make this equation true. Who is right? Why? Draw a picture to support your idea.

$$2 = \square \div 6$$

Possible Solution:

$$2 = 12 \div 6$$

