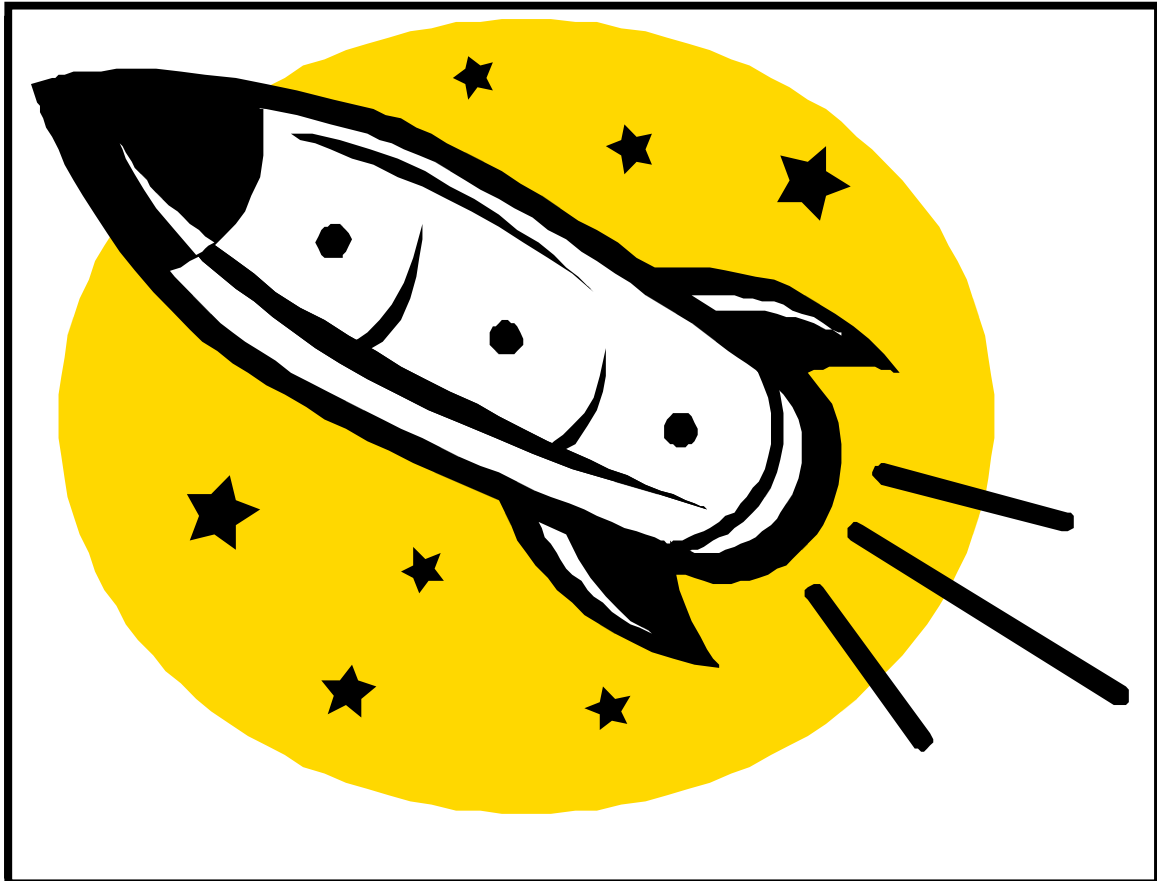


# **Cranford Public Schools**

**Soar into Summer with Math!**



## **For Students Entering Grade 3**

This summer math booklet was developed to provide students an opportunity to review grade level math concepts and to improve math performance.

**Cranford Public Schools  
Summer Mathematics Packet  
2009**

Dear Parents,

In this booklet you will find math activities that will help to review and maintain math skills learned in second grade and prepare your child for third grade. These activities are varied and meant to show how much fun and relevant math can be in everyday life. There are activities that can be done throughout vacation, at the pool, at a restaurant, on the beach, etc.

Students should select at least two different activities to complete each week.

All work should be returned to your child's third grade teacher. Have a time "Soaring Into Summer with Math!"



### **Week 1 / Basic Facts**

Basic facts are important for computation all through the elementary grades.

Thought for the week: Math is Fun!

1. Write your ordinal numbers 1-20. Remember most of your ordinal numbers end in the (first, \_\_\_\_\_, \_\_\_\_\_, fourth, . . . .).
2. Write the whole numbers 1 to 100.
3. Doubles – Complete the following problems listed below. Then, write the double + 1 for each one. For example, the double  $5 + 5$  is 10, and the "double plus 1" fact  $5 + 5$  is  $5 + 6$ .

$2+2 = \underline{\quad}$

$7+7 = \underline{\quad}$

$9+9 = \underline{\quad}$

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

$5+5 = \underline{\quad}$

$4+4 = \underline{\quad}$

$8+8 = \underline{\quad}$

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

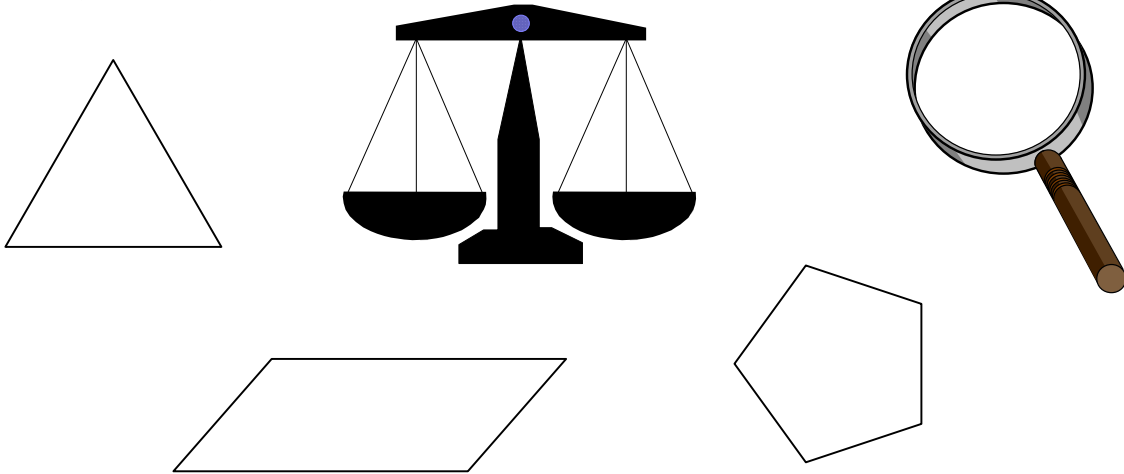
4. Using the information listed below, construct a picture graph.  
**Remember your graph must be labeled, have a title, and start with the number 0!**

Title – Favorite Ice Cream Flavors in Room 211

7 students like chocolate  
4 students like strawberry  
2 students like cookies and cream  
5 students like vanilla  
5 students like cherry

After completing the graph, write three complete sentences interpreting what you have learned from the graph.

5. Look at the shapes below. Which shapes are symmetrical? Circle the shapes that are symmetrical, and then draw their line(s) of symmetry.



## **Week 2 / Addition and Subtraction with and without Regrouping**

These two areas constitute a large portion of second grade math and should be reviewed over the summer in order to remember the operations.

Thought for the week: Numbers are Everywhere!



Cranford Public Schools  
Summer Mathematics Packet  
2009

1. Complete the addition problems below. Some of these problems need regrouping.

$$\begin{array}{r} 23 \\ + 12 \\ \hline \end{array} \quad \begin{array}{r} 40 \\ + 34 \\ \hline \end{array} \quad \begin{array}{r} 35 \\ + 54 \\ \hline \end{array} \quad \begin{array}{r} 89 \\ + 22 \\ \hline \end{array} \quad \begin{array}{r} 49 \\ + 13 \\ \hline \end{array} \quad \begin{array}{r} 76 \\ + 35 \\ \hline \end{array}$$

2. Complete the addition problems below. Most of these problems need regrouping.

$$\begin{array}{r} 42 \\ + 33 \\ \hline \end{array} \quad \begin{array}{r} 67 \\ + 21 \\ \hline \end{array} \quad \begin{array}{r} 59 \\ + 74 \\ \hline \end{array} \quad \begin{array}{r} 75 \\ + 47 \\ \hline \end{array} \quad \begin{array}{r} 67 \\ + 34 \\ \hline \end{array} \quad \begin{array}{r} 89 \\ + 26 \\ \hline \end{array}$$

3. Complete the subtraction problems. Some of these problems need regrouping.

$$\begin{array}{r} 56 \\ - 23 \\ \hline \end{array} \quad \begin{array}{r} 78 \\ - 41 \\ \hline \end{array} \quad \begin{array}{r} 34 \\ - 12 \\ \hline \end{array} \quad \begin{array}{r} 62 \\ - 56 \\ \hline \end{array} \quad \begin{array}{r} 45 \\ - 28 \\ \hline \end{array} \quad \begin{array}{r} 60 \\ - 39 \\ \hline \end{array}$$

4. Complete the subtraction problems. Most of these problems need regrouping.

$$\begin{array}{r} 74 \\ - 23 \\ \hline \end{array} \quad \begin{array}{r} 96 \\ - 41 \\ \hline \end{array} \quad \begin{array}{r} 54 \\ - 18 \\ \hline \end{array} \quad \begin{array}{r} 64 \\ - 15 \\ \hline \end{array} \quad \begin{array}{r} 56 \\ - 27 \\ \hline \end{array} \quad \begin{array}{r} 86 \\ - 37 \\ \hline \end{array}$$

5. Complete these challenging addition and subtraction problems with regrouping.

$$\begin{array}{r} 186 \\ - 59 \\ \hline \end{array} \quad \begin{array}{r} 345 \\ + 67 \\ \hline \end{array} \quad \begin{array}{r} 567 \\ - 89 \\ \hline \end{array} \quad \begin{array}{r} 781 \\ + 94 \\ \hline \end{array}$$

$$\begin{array}{r} 120 \\ - 35 \\ \hline \end{array} \quad \begin{array}{r} 345 \\ + 27 \\ \hline \end{array}$$



### Week 3 / Money Sense

Money is used by children on a daily basis. Children need to be able to count by 1's, 5's, 10's, 25's, and 50's to \$1.00. Children need to be able to identify the different coins and their value.

Thought for the week: Money Counts!

1. Identify the following coins and tell the value of each coin.



\_\_\_\_\_



\_\_\_\_\_



\_\_\_\_\_



\_\_\_\_\_



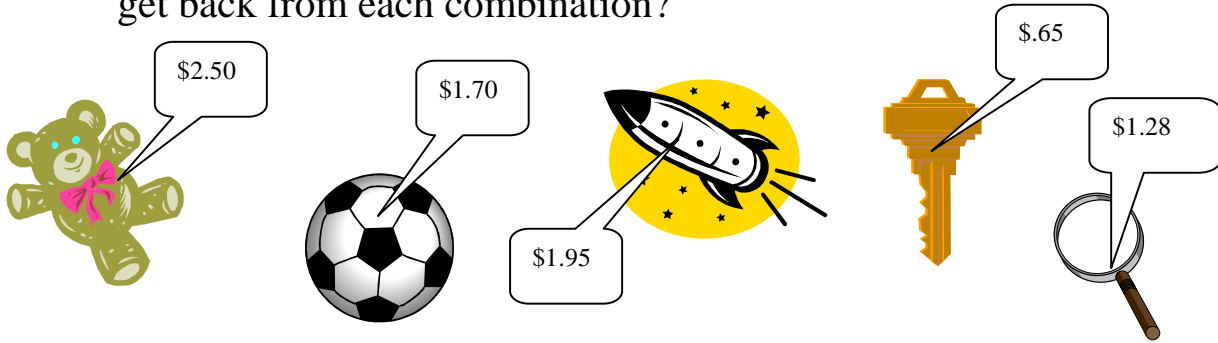
\_\_\_\_\_

2. Show 4 different ways to make 25 cents.

Show 4 different ways to make 50 cents.

3. You have \$1.00. You spend 42 cents. How much change will you get back? Show two different ways the change can be made.

4. You are going to the store on Saturday. You have saved \$4.00 from your allowance. You want to buy two items. What two combinations of items can you buy? How much change will you get back from each combination?



5. The Smith family has decided to go to The Hamburger Shop for lunch. They have two children named James and Beth. They can only spend \$10.00 total for their two meals. Select a lunch for the children and determine the total amount for the meal.



<b>The Hamburger Shop Menu</b>	
Regular Hamburger and Fries	- \$3.15
Large Hamburger and Fries	- \$4.25
Cheeseburger and Fries	- \$3.45
Bacon Burger and Fries	- \$4.15
Coke, Orange, Sprite, Grape drink	- \$1.00



## Week 4 / Fractions

Fractions are important for children to understand.

Thought for the week: Sharing is Great!

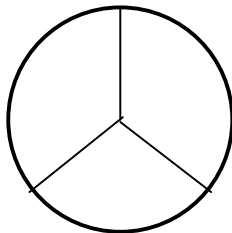
1. Cut 4 strips of paper the same length. Make one strip the whole. Fold one strip to make halves. Fold one strip to make thirds. Fold one strip to make fourths.

Lay the strips one under the other with the whole on top. Compare the sizes of each part and answer the questions below.

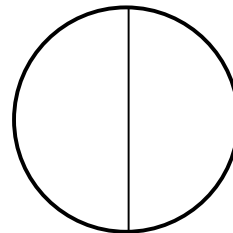
- Which is larger: one whole or one-half?
- Which is larger: one-third or one-fourth?
- Which is smaller: one-third or one-half?
- Which is smaller: one-half or one-fourth?

2. Cynthia was having a pizza party for her birthday. She invited 3 friends to her party. She ordered one large pizza that has twelve slices. How many slices did each girl receive (assume that all the girls received the same amount of slices)?

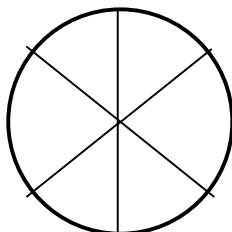
3. Color each circle to match the fraction next to it.



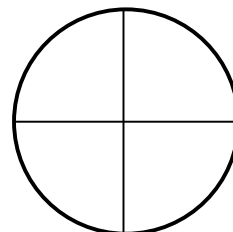
$$\frac{2}{3}$$



$$\frac{1}{2}$$



$$\frac{4}{6}$$



$$\frac{3}{4}$$

4. Complete this activity with your parents. First, take an orange and cut it in half. How many pieces do you have?

Second, cut each orange piece in half again. How many pieces do you have now?

Oranges are good for you, so go ahead and enjoy your healthy snack!

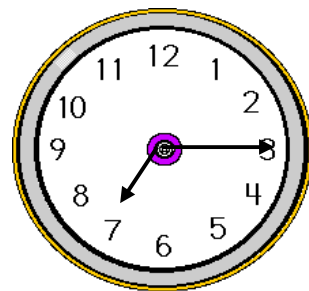
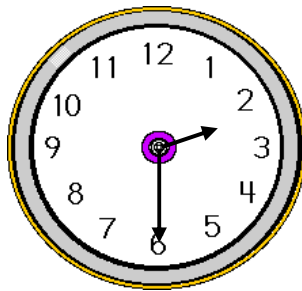
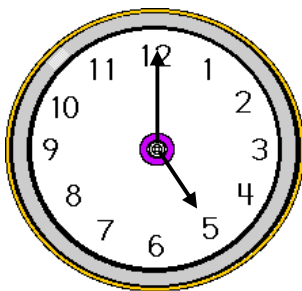
5. List six things that you can see or buy at the grocery store that show fractions (For example, pizza is cut into equal sized pieces).

### Week 5 / Time

Time is very important in our daily lives. Everything revolves around time. Whether it is to go to work, school, the park, or to grandmother's house, our children must learn to use time wisely and productively.

Thought for the week: Time flies!

1. Write the correct time for each of the clocks below.



2. Make a clock of your own. You must have the hour hand and minute hand as well as your minute intervals. You can use any materials you would like. **Have fun!**
3. Make a list of 5 things people have used to tell time.
4. Make a list of the things you did for one hour. Include the time and how long you spent doing each activity.
5. Kathy and her two friends went to the pool with her mother at 10:00 a.m. They went down the water slide and played with their floating ball. They left the pool at 1:30 p.m. How long did they stay at the pool?

## Week 6 / Multiplication and Division

Multiplication and division are opposites. Multiplication is the adding of numbers in equal groups and division is the separating of numbers to know how many groups there are of equal size.

Thought for the week: Opposites

1. Complete the following multiplication equations.

$3 \times 3 =$

$2 \times 6 =$

$4 \times 2 =$

$7 \times 1 =$

$5 \times 5 =$

$4 \times 3 =$

2. Complete the following division equations.

$12 \div 4 =$

$9 \div 3 =$

$20 \div 4 =$

$15 \div 3 =$

$10 \div 2 =$

$8 \div 2 =$

3. Complete these division and multiplication equations.

$10 \times 2 =$

$20 \times 2 =$

$12 \times 3 =$

$31 \times 4 =$

$25 \div 5 =$

$27 \div 9 =$

$21 \div 3 =$

4. Peter had 48 baseball cards in his collection. He decided to give 24 of the baseball cards to his 4 friends. How many baseball cards did each of his friends receive?

5. Draw a picture to show these two multiplication problems. Then, write the multiplication problems and answers.

6 groups of 5

4 groups of 7

### **Week 7 / Marvelous Math Fun!**

This week, you have the opportunity to pick some fun math activities to complete. You can do as many as you would like to. I hope you select more than one to accomplish.

**Remember, this week's activities are fun, fun, fun!**

Thought for the week: Enjoy the fun of math!

1. Read a fun book about math.

2. Write a letter to a friend telling them how you spent your time this summer.
3. Make a poster to encourage children to save money.
4. Make up a song or rap about math.
5. Make multiplication flash cards.
6. Draw a picture using math shapes and symbols.

### **Week 8 / Problem Solving**

Problem solving and application is the ability to use the skills known to solve problems. This is important in our everyday lives and shows how math is used constantly.

Select the problems you can do. Show your work. Remember to try. If you need help, ask your parents.

Thought for the week: You are a problem solver!

Kim and Michael wanted to earn money to go to the County Fair. They decided to set up a crushed-ice drink stand on the front lawn. Their house was next door to the neighborhood playground.

1. Make a list of 5 different crushed-ice drinks that you think would sell well at the stand.
2. Kim and Michael had to price the different drinks based on the flavor and the size. They decided the most expensive drink would be 50 cents. How much do you think each drink should cost?

**Cranford Public Schools  
Summer Mathematics Packet  
2009**

3. They decided they needed a poster to let children know about the stand and how much each item cost. Make a poster with each drink and its cost.
  
4. If a person came to Kim and Michael's stand with \$1.00, what could they buy?

Would they get change back?

How much?

5. Kim and Michael earned \$30.00. They were very excited about the money they earned. They gave their parents \$6.00 for the ingredients used to make the drinks. How much would Kim and Michael each receive if they divided the remaining money equally?