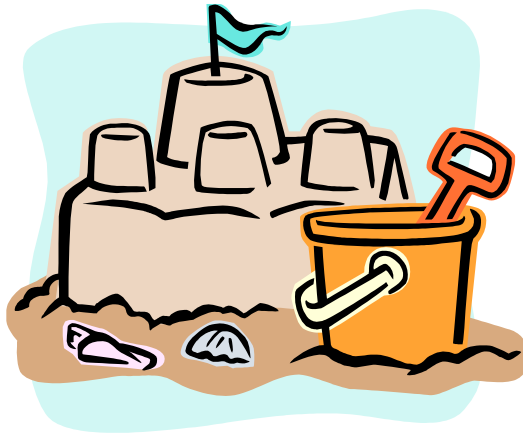




# MATH PACKET



*for*

Students Entering the **First Grade**

Students Name: \_\_\_\_\_  
*First and Last*

Student's First Grade Teacher: \_\_\_\_\_

Parent's Signature: \_\_\_\_\_

## INTRODUCTION

Welcome to the summer math packet for students entering First Grade. The design of the activities is meant to support instruction in the new curriculum in both its content and presentation. Therefore, the activities are not to be done as independent problems, but to be worked on with a parent, guardian or older brother or sister. Talking about the problem is an important part of completing each activity.

In First Grade, students will explore math concepts based on four standards. The eight activities in this summer math packet reflect the content of those four standards.

## EXPECTATION

To receive credit for this packet, students must complete **at least six** of the activities with **at least one being from each of the 4 standards**.

Summer Packet Content:

Standard 1: Operations and Algebraic Thinking

- Activity A: Birthday Oak
- Activity B: Main Street Candy Store

Standard 2: Number and Operations in Base Ten

- Activity A: Fallen Stars
- Activity B: Birthday Treat Bags

Standard 3: Measurement and Data

- Activity A: Non-Standard Measurement
- Activity B: Jack & Jill

Standard 4: Geometry

- Activity A: Matching Shapes
- Activity B: Folding Paper

All packets are due Friday, September 13, 2019. There will be a prize for those students returning to Ritchie Park who complete the required activities. Before returning this packet in the fall, please make sure that the front of the packet is completed and signed. **We must have the student's first and LAST name to ensure that credit will be given to the right child.** Thank you!

## Entering Grade 1: Operations and Algebraic Thinking, Activity A

**Directions:** Read through the following problem and answer the questions. Use the space on the back of this page to complete your work. You may work with a parent, older brother or sister, or friend, but you must show all of your ideas in words, pictures or symbols to completely answer the questions.

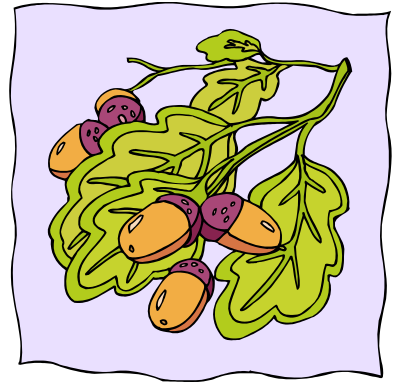
On the day Miguel was born, his father planted an oak tree in the backyard. The tree was 10 feet tall on the day Miguel was born.

On his first birthday his parents measured the height of the tree. It had grown to 12 feet.

The following year, when Miguel was two, the tree was 14 feet tall.

On Miguel's third birthday, the tree was 16 feet tall.

- A) If this pattern continues, how tall will the tree be on his fourth birthday?
- B) How many feet does the tree grow each year?



### **CHALLENGE:**

- C) How tall will the tree be when Miguel celebrates his tenth birthday?
- D) On his tenth birthday, how much will the tree have grown since it was first planted?

REMEMBER to show how you know your answers are correct.

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## Entering Grade 1: Operations and Algebraic Thinking, Activity B

**Directions:** Read through the following problem and answer the questions. Use the space on the back of this page to complete your work. You may work with a parent, older brother or sister, or friend, but you must show all of your ideas in words, pictures or symbols to completely answer the questions.

The Main Street Candy Store is having a sale on lollipops. The first lollipop costs 9 cents. Each additional lollipop costs 4 cents.

- A) Sherry had 20 cents, how many lollipops could she buy?

Her little brother, Larry, found 5 pennies in his pocket.

- B) If he gave them to Sherry, how many lollipops could they buy all together?

### **CHALLENGE:**

Later that afternoon, Sherry's sister, Mary spent a total of 37 cents on lollipops at the same store.

- C) How many lollipops did she buy?



REMEMBER to show how you know your answers are correct.

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## Entering Grade 1: Number and Operations in Base Ten, Activity A

**Directions:** Read through the following problem and answer the questions. Use the space on the back of this page to complete your work. You may work with a parent, older brother or sister, or friend, but you must show all of your ideas in words, pictures or symbols to completely answer the questions.

Jaylon spilled a container of star stickers on the floor.



- A) How many groups of 10 star stickers are there on the floor?
- B) How many stickers are left over?
- C) What is the total number of stickers that were spilled on the floor?

**CHALLENGE:**

D) If, Jaylon wanted to have a total of 80 star stickers, how many more does he need?

REMEMBER to show how you know your answers are correct.

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## Entering Grade 1: Number and Operations in Base Ten, Activity B

**Directions:** Read through the following problem and answer the questions. Use the space on the back of this page to complete your work. You may work with a parent, older brother or sister, or friend, but you must show all of your ideas in words, pictures or symbols to completely answer the questions.

Roberta has 100 candy treats. For her 11<sup>th</sup> birthday party, she wants to make goody bags for her guests with 11 in each bag.

- A) How many goody bags can she make with 100 pieces of candy?

### **CHALLENGE:**

Roberta has invited 12 friends to her party.

- B) How many more piece of candy does she need to make a goody bag for each guest?



REMEMBER to show how you know your answers are correct.

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## Entering Grade 1: Measurement and Data, Activity A

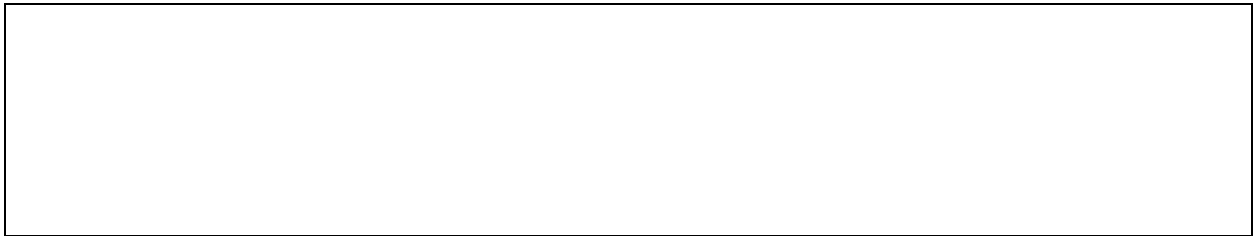
**Directions:** Read through the following problem and answer the questions. Use the space on the back of this page to complete your work. You may work with a parent, older brother or sister, or friend, but you must show all of your ideas in words, pictures or symbols to completely answer the questions.

For this activity you will need to choose three objects that are different sizes, but not too big. You could choose a penny, a paper clip, a nail, a button, a pencil or even a toothpick. The three objects need to fit within the boxes below. What you have chosen them, trace in the appropriate box below and label each.

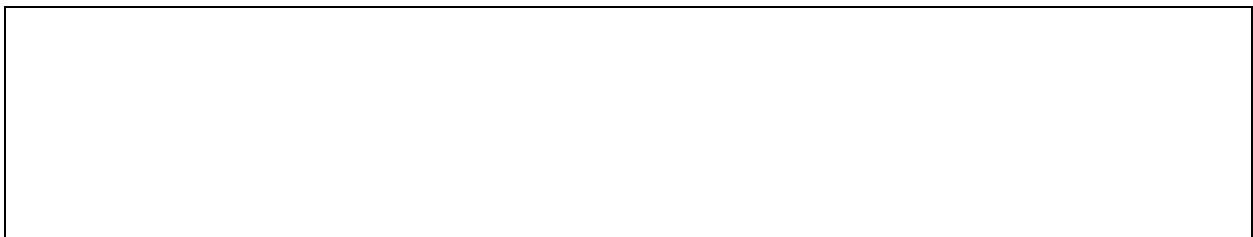
Smallest object #1 is a \_\_\_\_\_



Medium size object #2 is a \_\_\_\_\_



Largest object #3 is a \_\_\_\_\_



Now you are going to use these objects to measure two additional things in your home, and complete the **Data Chart** on the back of this page.

### Measurement Data Chart

	Item #1 is a: _____	Item #2 is a: _____
Smallest object #1		
Medium size object #2		
Largest object #3		

A) Explain how you used the objects to figure out the length of the two items you chose. You want to explain carefully, so someone else will be able to measure the items in the same way that you did.

#### **CHALLENGE:**

B) Which one of your three objects would you choose to measure the width of your bed? Explain why the object you chose is the best one to use to measure the width of your bed.

REMEMBER to show how you know your answers are correct.

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## Entering Grade 1: Measurement and Data, Activity B

**Directions:** Read through the following problem and answer the questions. Use the space on the back of this page to complete your work. You may work with a parent, older brother or sister, or friend, but you must show all of your ideas in words, pictures or symbols to completely answer the questions.

Read the nursery rhyme below.



Jack and Jill  
went up a hill  
to fetch a pail of water.  
Jack fell down  
and broke his crown,  
and Jill came tumbling after.

Use tally marks to complete the data chart below.

Length of Words by the Number of Letters in the Word

Fewer and three letters	
Three Letters	
Four Letters	
Five Letters	
More than five letters	


Now answer the questions on the other side of this paper.

A) What length of word is used the most in this nursery rhyme?

B) What length of word is used least?

**CHALLENGE:**

Pick a short rhyme or poem of your own and copy it into the space below.

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C) Complete the same table as before using the nursery rhyme or poem that you chose.

Length of Words by the Number of Letters in the Word

Fewer and three letters	
Three Letters	
Four Letters	
Five Letters	
More than five letters	

Now answer the questions on the other side of this paper.

D) What length of word is used the most in this nursery rhyme?

E) What length of word is used least?

F) Write a sentence comparing the data from Jack and Jill with the data from your nursery rhyme or poem.

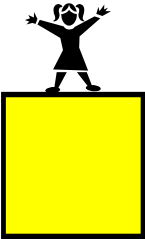

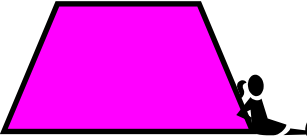
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## Entering Grade 1: Geometry, Activity A

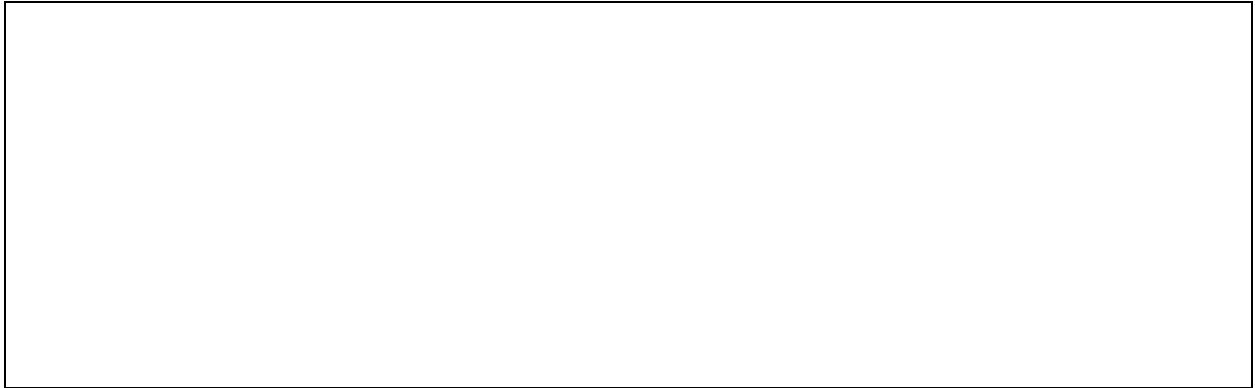
Directions: Read through the following problem and answer the questions. Use the space on the back of this page to complete your work. You may work with a parent, older brother or sister, or friend, but you must show all of your ideas in words, pictures or symbols to completely answer the questions.

Match the following shapes to an object in your home. Tell how each shape is like the object that you chose.

The Shape	Your Object	How are they alike?
		
		
		

**CHALLENGE:**

Choose one of the shapes and draw it using a ruler in the space below



List as many objects as you can that are the same shape (at least 10, please).



## Entering Grade 1: Geometry, Activity B

**Directions:** Read through the following problem and answer the questions. Use the space on the back of this page to complete your work. You may work with a parent, older brother or sister, or friend, but you must show all of your ideas in words, pictures or symbols to completely answer the questions.

For this activity use the sheet of paper on the back of this packet labeled “folding sheet”. The shape that a piece of paper makes is called a rectangle. Take the rectangle piece of paper and fold into 4 equal parts.

- A) Use a pencil and a ruler to draw lines in the rectangle below to that show how you folded your paper to get 4 equal parts.

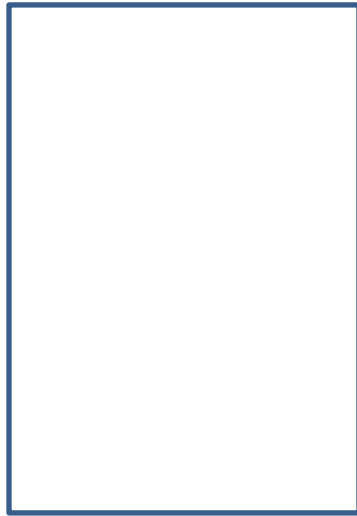


First Example

- B) Can you think of three more ways to fold the paper in 4 equal portions that are different from each other?
- C) Use the rectangles on the back of this page to record as many as you can.



Second Example



Third Example



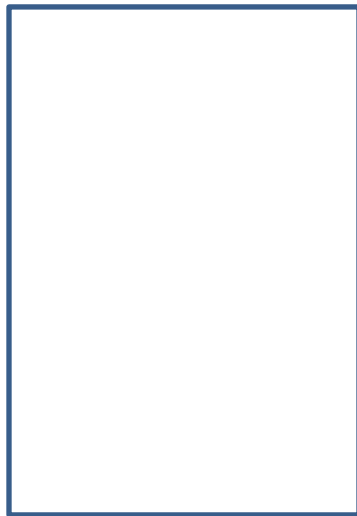
Fourth Example

**CHALLENGE:**

D) How many ways can you fold the paper into three equal parts? Use additional paper, if you need to.



First Example



Second Example



Third Example

Folding Sheet

