Kindergarten Math and Science Expectations

2nd Quarter

Dear Parents,

In Mathematics, your child will work to answer the following questions through exploration of these ideas and concepts:

What do good counters do when counting?

- Count to at least 50 by ones and to 100 by tens.
- Count up to at least 50 beginning from any given number.
- Read, write and represent numbers at least to 10.
- Count to tell the number of objects, pairing each object with one number name (may touch and count each object).
- Understand the next number is one larger than the number before.
- Identify whether the number of objects in one group is *greater than, less than,* or *equal to* the number of objects in another group.
- Count objects in a variety of arrangements and quickly identify the number of items in a set without counting.

How can we represent what happens when we combine groups and when we take groups apart?

- Represent problem solving by using objects, fingers, mental images, sounds, or by acting out simple adding and subtracting situations
- Use objects to represent how we can break numbers, up to 10, apart (*EX: 10 can be broken into 1 and 9, 2 and 8, etc.)*

How do we compare objects?

- Sort objects into given categories and count the number of objects in each category.
- Describe and compare attributes of objects such as: size, number, color, shape, length, weight, height, and temperature

How do we describe and model shapes in our environment?

- Describe objects in the environment using names of shapes.
- Describe the positions of objects using terms such as *above, below, beside, in front of, behind,* and *next to.*
- Correctly name shapes, regardless of the direction or overall size of the shape.
- Model shapes in the world by building and drawing shapes.

In Science, your child will work to answer the following questions through exploration of ideas and concepts about *Forces and Interactions: Pushes and Pulls*:

What causes an object to move?

- Pushing or pulling an object can change the speed or direction of its motion.
- Pushing or pulling an object can start or stop it.
- Size, weight, and shape affect an object's motion.
- Objects push or pull each other when they collide or are connected.
- When objects touch or collide, they push on one another and can change motion.

What happens if you push or pull an object with different amounts of force?

- Pushes and pulls can have different strengths and directions.
- A bigger push or pull makes things speed up or slow down more quickly.
- Applying understanding of the effects of different strengths or different directions of pushes and pulls on the motion of an object to design a solution to a problem.