### Dear Parents,

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

#### Why do I need a variety of strategies for problem solving?

- Solve word problems by adding and subtracting (within 20) using objects, drawings, and/or equations.
- Add and subtract within 20 using a variety of strategies, demonstrating *computational fluency* within 10.
- Use the properties of operations as strategies to add and subtract.

(Ex: If 8 + 3 = 11 is known, then 3 + 8 = 11 can also be known – commutative property of addition; to add 2 + 6 + 4, the second two numbers can be added to make a ten, so 2 + 6 + 4 = 2 + 10 = 12 – associative property of addition)

- Understand the meaning of the equal sign and determine if equations involving addition and subtraction are true or false.
- Determine the unknown number that makes an addition or subtraction equation true. (Ex: 8 +? =11; 5 =? 3; 6 + 6 =?)

#### Why does my addition or subtraction strategy work?

- Understand that the two digits of a two-digit number represent amounts of tens and ones.
- Compare two two-digit numbers based on the meanings of the tens and ones digits.
- Add within 100 using concrete models or drawings, relate the strategy used to a written expression or equation, and explain their reasoning.
- Mentally find 10 more or 10 less than a given number, without having to count.
- Subtract multiples of 10 from multiples of 10 using concrete models or drawings, relate the strategy used to a written expression or equation, and explain their reasoning.

#### What are the important things to remember when I measure?

• Measure and express the length of an object as a whole number of "length" units, with no gaps or overlaps.

#### How does a part (share) relate to its whole?

• Partition circles and rectangles into two and four equal shares; describe the shares using the words *halves, fourths,* and *quarters,* and use the phrases *half of, fourth of,* and *quarter of.* 

# In Science, your child will continue to explore of ideas and concepts about *Waves: Light and Sound* and answer questions and explore concepts about *Space Systems*:

#### How can we observe, describe, and predict patterns of objects in the sky?

- Observations can be used to describe patterns in the natural world in order to answer scientific questions.
- Patterns in the natural world can be observed, used to describe phenomena, and used as evidence.
- The Sun appears to rise in one part of the sky, move across the sky, and set.
- The moon has a pattern which can be observed through its changing phases.
- Stars, other than our sun, are visible at night but not during the day.

#### How does the amount of daylight change throughout the year?

- Seasonal patterns of sunrise and sunset can be observed, described, and predicted, and can determine the amount of daylight (longer periods of sunlight in summer, less sunlight in winter).
- Patterns in the natural world can be observed, used to describe phenomena, and used as evidence.