



Dear Parents,

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

What strategies help me become fluent with multiplication/division?

- Determine the unknown whole number in a multiplication or division equation using the relationship of the three numbers. (Ex: $8 \times ? = 48$; $5 = ? \div 3$; $6 \times 6 = ?$)
- Multiply one-digit whole numbers by multiples of 10 in the range of 10-90.
- Solve one- and two-step word problems involving multiplication and division within 100.
- Use a variety of strategies, including properties of operations, to multiply and divide within 100.
- Maintain fluency with 0, 1, 2, 3, 4, 5, and 10 facts; demonstrate fluency with 6 and 9 facts.

Why do I need a variety of strategies for adding and subtracting larger numbers?

- Use a variety of strategies to add and subtract within 1000, working towards computational fluency.
- Solve two-step word problems using the four operations.

How can I build and represent four-digit numbers in more than one way?

- Understand that the four digits of a four-digit number represent amounts of thousands, hundreds, tens, and ones
- Read and write numbers to 10,000.
- Compare two four-digit numbers.

How can models help me compare fractions?

- Understand that a fraction means to divide a whole object into equal size parts.
- Understand what the numerator and the denominator represent in a fraction.
- Represent and explain fractions as numbers that are part of our number system and as numbers on the number line.
- Explain equivalence of fractions and compare fractions by reasoning about their size.
- Generate measurement data and show the data by making a line plot.

How do I measure attributes of shapes (plane figures)?

- Relate area to the operations of multiplication and addition; recognize area and an *attribute* of plane figures.
- Solve problems involving perimeter of geometric shapes.
- Explain how shapes in different categories (Ex: rhombuses, rectangles, etc.) can share *attributes* (Ex: having four sides) and the shared *attributes* can define a larger category.

In Science, your child will continue to answer questions through exploration of ideas and concepts about *Inheritance and Variation of Traits - Life Cycles and Traits*:

How are organisms' life cycles similar and different?

- Reproduction is essential to the continued existence of every kind of organism.
- Plants and animals have unique and diverse life cycles.

How do organisms vary in their traits?

- Many characteristics of organisms are inherited from their parents.
- Other characteristics result from individuals' interactions with the environment, which can range from diet to learning.
- Many characteristics involve both inheritance and environment.
- Different organisms vary in how they look and function because they have different inherited information.
- The environment also affects the traits that an organism develops.

How do variations in traits help organisms to survive and reproduce?

- The environment also affects the traits that an organism develops.
- Sometimes the differences in characteristics between individuals of the same species provide advantages in surviving, finding mates, and reproducing.