

3rd Grade Math and Science Expectations

Dear Parents,

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

Why does my multiplication/division strategy work?

- Determine the unknown whole number in a multiplication or division equation using the relationship of the three numbers. (Ex: 8 x ? = 48; 5 = ? ÷ 3; 6 x 6 =?)
- Solve one- and two-step word problems involving multiplication and division within 100.
- Multiply one-digit whole numbers by multiples of 10 in the range of 10-90
- Use a variety of strategies, including properties of operations, to multiply and divide within 100.
- Demonstrate fluency with all products of two one-digit numbers and 10 facts.

How can I be strategic and accurate with addition and subtraction strategies?

- Demonstrate computational fluency when adding and subtracting within 1000.
- Solve two-step word problems using the four operations.

Why is it important to represent four-digit numbers in a variety of ways?

- 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 different fractions be equal?

- 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.

How does area measure relate to addition and subtraction?

- Relate area to the operations of multiplication and addition; recognize area and an attribute of plane figures.
- Solve problems involving perimeter of geometric shapes.

In Science, your child will answer questions through exploration of ideas and concepts about *Interdependent Relationships in Ecosystems:*

What happens to organisms when their environment changes?

- Organisms react differently to changes in their environmental settings. Some survive and reproduce. Some move to new locations or into the changed environment. Some will die.
- Organisms and their habitats make up a system in which the parts depend on each other for survival. (ecosystem)
- For any particular habitat, some organisms survive well, some don't survive well, and some cannot survive at all.
- Populations live in a variety of habitats, and changes in those habitats affect the organisms living there.

How does being a group affect and animal?

- Some animals form groups to help members survive (ex: ant colonies, herds of bison, hives of bees).
- Being part of a group helps animals obtain food, defend themselves, and cope with changes.
- Animal groups may serve different functions and vary in size.

How are plants, animals, and environments of the past similar or different from current plants, animals and environments?

- Some types of plants and animals that once lived on Earth are no longer found anywhere.
- Fossils provide evidence about organisms that lived long ago.
- Fossils provide evidence about the nature of the environments long ago.

Rogers Public Schools | 5/23/17