

# Suffield Public Schools Kindergarten Math -Term 2 Report Card Companion Document



## Math

Students today are preparing to enter into a 21st century workforce that looks vastly different than what we have ever known. Gone are the days of memorizing formulas and carrying out lock step procedures. Instead, there is a critical need for students to **understand** the mathematical foundations that explain why and how concepts work. With a focus on developing number sense and critical thinking, the Common Core Standards in Mathematics stresses conceptual understanding of key ideas where students need to be able to reason mathematically and communicate their reasoning effectively to others. The development of solid conceptual understanding, a high degree of procedural skill and fluency, and the ability to apply the math they know to solve problems inside and outside the math classroom has broadened what it means to be able to do and learn math. **The following guide will help you gain a better sense of what each of the Common Core Standards requires students to achieve.**



### Kindergarten Math End of Term 2 Standards' Expectations

**The first 3 math objectives** are standards for mathematical practice - how your child approaches problems and communicates her/his mathematical reasoning. Throughout the year, your child will continue to develop these dispositions as they deepen their understanding of mathematical concepts and refine their approaches to problems.

**Math Practice 1- Make sense of problems and persevere in solving them:** Mathematically proficient students start by explaining to themselves the meaning of a problem and looking for entry points to its solution. Mathematically proficient

students check their answers to problems using a different method, and they continually ask themselves, "Does this make sense?"

**Math Practice 3- Construct viable arguments and critique the reasoning of others:** Mathematically proficient students justify their conclusions with evidence, communicate them to others, and respond to the arguments of others. Mathematically proficient students can listen or read the arguments of others, decide whether they make sense, and ask useful questions to clarify or improve the arguments.

**Math Practice 6- Communicates reasoning using clear and precise language, vocabulary, and notation:** Mathematically proficient students try to communicate precisely to others by: using clear definitions, stating the meaning of symbols they choose, specifying units of measure and labeling accurately. Mathematically proficient students calculate accurately and efficiently and appropriately express numerical answers.

### Counting and Cardinality

**Knows number names and the count sequence-** Mathematically proficient students rote count to 50 by both tens and ones. They count out a set of objects up to 15 and represent quantities with pictures, numbers, and/or words.

1	2	3	4
5	6	7	8
9	10	11	12
13	14	15	16
17	18	19	20

**Counts to tell the numbers of objects-** Mathematically proficient students count objects up to 15 regardless of the organization of the objects. They can identify a number that is one more or one less within 15. Mathematically proficient students connect quantities to number names up to 15.

**Compares numbers-** Mathematically proficient students order quantities from fewest to most within 15. They compare two groups of objects using strategies such as lining the objects up, pairing objects, and counting the objects for as many as 15 objects per group. Mathematically proficient students represent quantities using pictures, numbers, and/or words. They compare two numbers or quantities between 0 and 15 using greater than, less than, or equal to.

### Operations and Algebraic Thinking

**Understands addition and subtraction-** Mathematically proficient students identify one more or one fewer than a number within 15. They find multiple ways to compose and decompose numbers up to 5.

### Measurement and Data

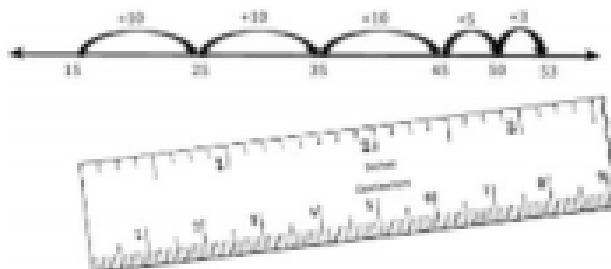
**Describes and compares measurable attributes-** Mathematically proficient students describe measurable attributes of objects such as length, weight, size and color. They directly compare two objects with a measurable attribute in common. Mathematically proficient students can determine which of two objects is longer.

**Classifies objects and counts the number of objects in each category-** Mathematically proficient students identify attributes such as color, size, and shape and use them to sort a group of up to 10 people/objects into categories. They find objects that share at least one attribute and label sets with a category. Mathematically proficient students develop language to describe the objects and compare how they are the same and different. They count, compare, and keep track of data in each of two categories while developing language for counting quantities (more, greater, less, fewer, equal to).

### Geometry

**Identifies and describes shapes-** Mathematically proficient students identify and describe the overall size, shape and features of familiar 3-D shapes. Students also develop the ability to use words that describe relative position.

**Analyzes, compares, creates, and composes shapes-** Mathematically proficient students make familiar 2 and 3 dimensional shapes. They combine 2-D shapes to create other 2-D shapes. Mathematically proficient students identify and describe the overall size, shape, and features of familiar 2 and 3 dimensional shapes.



# How can you support your child?

## General Math Support

- Ask questions to support your child with their homework:
  - o What do you already know about this problem?
  - o Can you draw a picture of what is happening?
  - o Does this remind you of a problem you have seen before?
  - o How did you solve this problem?
  - o How can you check your work?
  
- Offer manipulatives for your child to use at home to make concepts more concrete (exs. cereal, beans, pennies, blocks)

-Show that you have a growth mindset about math. Even if you struggle with math or don't have a clear understanding of a math concept, show your child you are excited to learn along with them.

-Make math fun and engaging for your child. Bring math into as many real world situations as possible. (ex. grocery shopping, baking, telling time, etc)

- Read the Family Letter for each unit to become familiar with the math concepts being introduced and what you can do to help. Letters are posted on the district website.

## Additional Resources:

- [Investigations Kindergarten](#)
- [Common Core State Standards for mathematics](#)
- [Helping your child learn mathematics, activities for grades PreK-5](#)