

Suffield Public Schools Grade 1 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.**



Grade 1 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.

Operations and Algebraic Thinking

Represent and solve problems involving addition and subtraction - Mathematically proficient students solve addition and subtraction word problems within 15. These problems include the use of up to 3 whole numbers.

Mathematically proficient students find all solutions to a put together/take apart problem when the two addends are unknown as well as comparison problems with the difference unknown. Students also represent numbers with equivalent expressions.



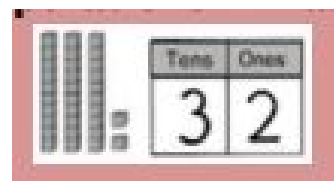
Understands and applies properties of operations and the relationship between addition and subtraction- Mathematically proficient students use strategies to determine the unknown whole number in an addition or subtraction equation/story within 15. They find all solutions to a put together/take apart problem with both addends unknown. Mathematically proficient students can analyze equations to determine if they are true and provide a general explanation of their reasoning.

Add and subtract within 20- Mathematically proficient students use appropriate computational strategies such as counting all or back, counting on, or using known facts to solve problems. They demonstrate fluency with +1, +2, -1, -2, +10 facts within 20. Mathematically proficient students decompose the number 10 in various ways and begin to develop automaticity with them.

Works with addition and subtraction equations- Mathematically proficient students represent numbers using equivalent expressions.

Numbers and Operations in Base Ten

Demonstrates fluency with basic addition and subtraction fact combinations to 10- Mathematically proficient students add and subtract within 10. Students solve addition problems within 3-5 seconds to demonstrate automaticity. They use concrete strategies to solve subtraction problems.



Extends the counting sequence (to 120)- Mathematically proficient students rote count, read, and write numbers to 120.

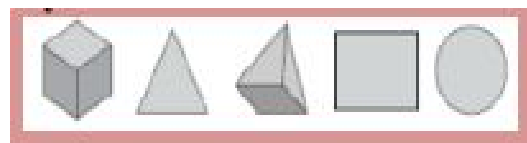
Measurement and Data

Measures lengths indirectly and by iterating (repeatedly applying) length units- Mathematically proficient students compare the length of two objects by indirectly using a third length. They demonstrate measuring techniques when measuring an object or distance with multiple units. These techniques include starting at the beginning, leaving no gaps/overlaps, and measuring in a straight line.

Tells and write time to the hour and half hour- Mathematically proficient students tell time to the nearest hour using both digital and analog clocks.

Geometry

Reasons with shapes and attributes- Mathematically proficient students understand that halves and fourths (quarters) apply to wholes divided into two/four equal parts. They partition circles and rectangles into two and four parts.



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 Grade 2](#)
- [Common Core State Standards for mathematics](#)
- [Helping your child learn mathematics, activities for grades PreK-5](#)