

# Suffield Public Schools Grade 2 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 2 Math End of Term 1 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 multi-step put together/take apart story problems within 75 including those with both addends unknown, a start unknown, or an unknown change. Their work includes a combination of equations, pictures/models, strategies, or sentences.

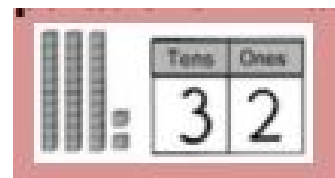


**Adds and subtracts within 20-** Mathematically proficient students add and subtract within 20 using known combinations. They solve problems involving multiple addends by using efficient strategies, models and representations. Students write and solve equations that are both vertical and horizontal.

## Numbers and Operations in Base Ten

**Demonstrates fluency with basic addition and subtraction fact combinations to 10-** Mathematically proficient students add within 10 within 3-5 seconds. They use strategies such as prolonged thinking and a number line to solve subtraction facts within 10.

*\*\* This is an end of grade 1 standard.\*\**



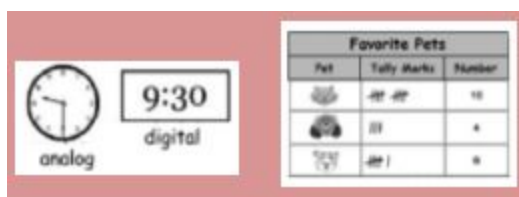
**Understands place value (of three-digit numbers)-** Mathematically proficient students understand that a 3-digit number represents amounts of hundreds, tens, and ones. They view 100 in multiple ways such as one hundred, ten tens, and 100 ones and that multiples of 100 (ex. 200, 300, 400, etc) are made up of a number of hundreds (2, 3, 4). Mathematically proficient students can read, write, count, and compare numbers within 1000 and can fluently count by 5s, 10s, and 100s.

**Applies place value understandings and properties of operations to add and subtract-** Mathematically proficient students solve problems using fluent computational strategies. These problems include put together/take apart story problems with both addends unknown and the start or change unknown. Mathematically proficient students use their understanding of place value to solve multi-step word problems involving money.

## Measurement and Data

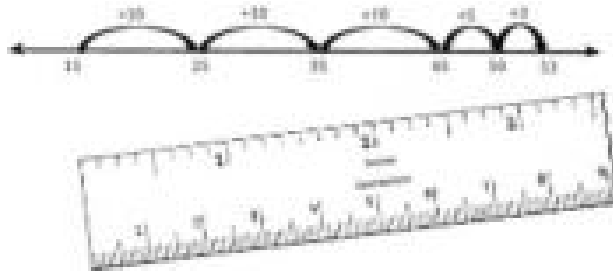
**Relates addition and subtraction to length-** Mathematically proficient students solve word problems by using and creating a number line. They equally space points on the line and use scaled jumps (e.g. 1s smaller than 10s, 10s smaller than 100s) as a strategy for solving.

**Works with time and money-** Mathematically proficient students accurately tell and write time to the nearest hour and half hour. They can solve multi-step word problems involving money and finding the difference between a two digit number and 100.



## Geometry

**Represents and interprets data-** Mathematically proficient students create, describe and interpret a variety of data representations, including picture graphs and bar graphs. They order, represent and describe a set of numerical data and can organize that data into up to four categories.



# 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?

-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)

- Offer manipulatives for your child to use at home to make concepts more concrete (exs. cereal, beans, pennies, blocks)

- 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](#)