

Suffield Public Schools

Grade 2 Math

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 -

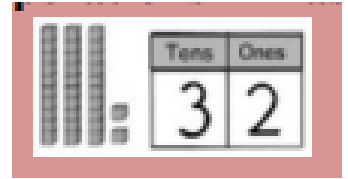
Mathematically proficient students solve put together/take apart story problems and add to/take from story problems within 20. They understand that quantities can be compared and represent their thinking using equations, drawings, or sentences.



Demonstrates fluency with basic addition and subtraction fact combinations to 20- Mathematically proficient students use mental strategies to add and subtract within 20. **By the end of the 2nd grade** students should know from memory all sums to 18. Students solve problems within 3-5 seconds to demonstrate automaticity. *On the report card, please note that 14 or less DCPM (Digits correct per minute) is a 1, 15-20 DCPM is a 2, 21-30 DCPM is a 3, and above 31.5 DCPM for both addition and subtraction is a 4.*

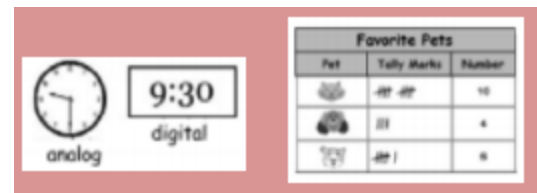
Numbers and Operations in Base Ten

Applies place value understanding and properties to add and subtract- Mathematically proficient students choose from a variety of strategies based on place value and properties of operations. Students may add by place value: $40 + 30 = 70$ and $8 + 7 = 15$ and $70 + 15 = 85$ or incremental adding (or subtracting-breaking one number into tens and ones); $48 + 10 = 58$, $58 + 10 = 68$, $68 + 10 = 78$, $78 + 7 = 85$.



Measurement and Data

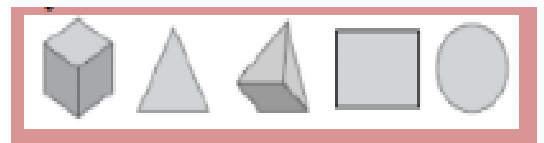
Works with time and money- Mathematically proficient students accurately tell and write time to the nearest hour and half hour. They can also identify coins and their corresponding values.



Favorite Pets		
Pet	Tally marks	Number
		4
		4
		4

Geometry

Reasons with shapes and attributes- Mathematically proficient students identify and classify 2D and 3D shapes using attributes including number and shapes of faces, number and length of sides, and number of angles and vertices. They draw shapes with these same attributes. Mathematically proficient students make rectangles out of the same size squares in each row and count the total number of squares. Mathematically proficient students partition 2-D shapes into halves, thirds and fourths, appropriately naming the regions. They recognize that halves, fourths, and thirds of the same whole can look different. ****Most students received a 1 or 2 on this standard since the unit addressing these standards are still in progress.**



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](#)