Parent Mathematics Guide for Third Grade

The Common Core has changed the way we ask our students to think about mathematics. The biggest challenge is having our students think about the numbers and what they are representing. Being able to solve a problem is still important, but now being able to understand the steps and skills and how they apply to solving problems is just as important. This guide will help you navigate the changes and be prepared for the expectations that will face your student in the year ahead.

Please note: All standards are not equal in their rigor; some standards may be more difficult for a student to understand or master. Thus, on assessments, some problems may require more steps or may require complex application of a student's knowledge and skills. When we are reporting on student progress, each standard is considered individually and points assigned to problems may represent the variety of the standards – and not necessarily the difficulty of the problem.

To access the Third Grade math curriculum:

Go to www.nausetschools.org

Click on curriculum (in the left hand menu bar)

Password is GoNauset!

Click on browse (at top)and choose Curriculum Calendars

Choose Grade 3 and Math from the drop down menus

This will enable you to see what is being taught and when. If you click on any unit you will see the specific skills and vocabulary your student should know. This work may be updated periodically.

Nauset School District

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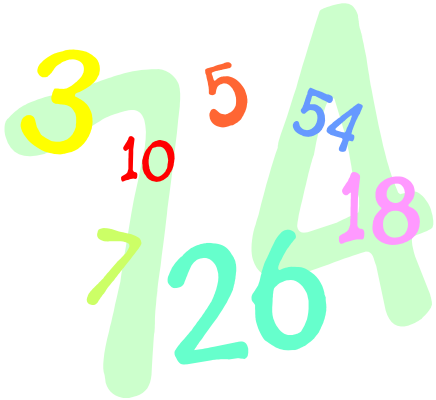
Nauset Public Schools
Nauset believes...every child matters.

Nauset Elementary Schools

Mathematics Guide

2018-19

Third Grade



Eastham, Eddy, Orleans, Stony Brook, and Wellfleet, Elementary Schools

Third Grade Fact Fluency Expectations:

multiplication within 9 x 9 and related division facts addition and subtraction

*40 facts/2 minutes

38 or more correct in allotted time= Mastered

34-37 correct in allotted time = Progressing

28-33 correct in allotted time = Starting

27 or less correct in allotted time = Not yet

The level of strategies your student is using is just as important as the time aspect. Are they just counting on or are they using more sophisticated strategies? Making tens in addition and subtraction as well as using doubles are higher level strategies. In multiplication, using a known fact to help derive an unknown fact is a good way to start. Understanding that the 4 tables is doubling a number and then doubling it again is a good illustration of a higher level way of solving. Practicing the strategies is more beneficial to building overall fluency than just practicing timed facts in isolation.

8 Mathematical Practices:

The 8 Mathematical Practices are the heart of the Common Core in mathematics. The Practices embody what a mathematically proficient student should demonstrate.

1. ***Make sense of problems and persevere in solving them.*** *This means that students understand what is happening in a problem and can think about the information in such a way as to recognize several solution paths. If one strategy does not work, they can reorganize their thinking in order to try another path towards solving it.

2. ***Reason abstractly and quantitatively.*** *This means that students understand quantities in a problem and any relationships between them. They are able to go between performing operations on the numbers present as well as to understand what those numbers ultimately represent.

3. Construct viable arguments and critique the reasoning of others. *This means that students are able to explain their thinking process as well as understand how others may have reasoned differently. They see similarities between different strategies as well as where they may differ.

4. Model with mathematics. *This means that students can take a real life situation and represent it with mathematical symbols and operations.

5. Use appropriate tools strategically. *This means that students are fluent in many different mathematical forms such as paper/pencil, manipulatives and technology, to name a few.

6. Attend to precision. *This means that students are accurate in their computation as well as their vocabulary when describing a mathematical situation.

7. Look for and make use of structure. *This means that students make connections between seemingly unrelated mathematics or problems. They recognize and apply properties of operations to help solve problems.

8. Look for and express regularity in repeated reasoning. *This means that students recognize repeating calculations and use them to arrive at shortcuts or formulas.

Four Critical Areas in 3rd Grade

(1) developing an understanding of multiplication and division, and strategies for multiplication and division within 100

(2) developing an understanding of fractions, especially unit fractions (fractions with a numerator of 1)

(3) developing an understanding of the structure of rectangular arrays and of area

(4) describing and analyzing two-dimensional shapes.

Parent Resources

Information and links to helpful documents and resources are available on the Nauset website for parents. These resources are intended to help parents navigate the mathematical demands in today's classroom as they work with their children at home.

Go to the Nauset website.

Click on the Parent tab in the top toolbar.

In the left hand toolbar you will see two links.

Elementary Math Materials: includes information from the Winter 2016 math forums, a guide to the 8 Mathematical Practices and a document containing mathematical terms that may be unfamiliar, along with examples and links to help clarify them.

Elementary Math Parent Tip Sheets: contains specific vocabulary and methods that may be included in each module, or unit of study. These tip sheets are released by Eureka Math, which is a common resource across the schools K-5. The models and methods within however may or may not be used based on the discretion of the classroom teacher in regards to the needs of their students.