

# Curriculum Parent Overview (Grade 5)

## MATHEMATICS

### UNIT #4: HOW MANY PEOPLE AND TEAMS? (MULTIPLICATION AND DIVISION 2)

#### CONTENT FOCUS:

Students review and practice various strategies for multiplication, including studying and learning the U.S. standard algorithm.

Students refine various strategies for solving division problems with up to 4-digit dividends and 2-digit divisors, using clear and concise notation.

Students use all four operations to solve a variety of multi-step problems in a real-world context.

#### UNIT FOCUS:

- **Solving multiplication problems fluently:** In this unit, students solve multiplication problems by using strategies that they have already examined and refined. They continue to gain fluency in solving multiplication problems by solving multi-digit problems. In the first investigation, students learn the steps of the U.S. standard algorithm, discuss the meaning of its notation, and practice using it.
- **Solving division problems efficiently:** When solving division problems, students will refer to familiar number relationships and use strategies for breaking numbers apart in order to create problems that are manageable. In investigation 2, they will continue to develop and refine computation strategies for division by using what they already know and understand well (familiar factor pairs, multiples of 10, relationships between numbers, etc). The goal is to use these strategies to break problems apart into smaller, easier problems. Practicing these strategies will build understanding about notating solutions clearly and concisely. By the end of the unit, it is expected that students will efficiently solve problems that have up to a 4-digit dividend and a 2-digit divisor (ex.  $1,280 \div 32$ ).

Throughout the unit, students will be asked to explain their thinking about how they chose to break numbers apart, how they kept track of the parts of the problem they've solved, and how they are using number relationships to help solve problems.

#### MATHEMATICAL PRACTICES:

MP2: Reason abstractly and quantitatively.

MP6: Attend to precision.

#### CONNECTIONS TO PREVIOUS CONTENT:

The work in this unit assumes that students understand the meaning of the operations of multiplication and division and how they are related. From their work in Unit 1 and practice since then, students should be solving multiplication problems fluently. They should have strategies for solving division problems, but may still be working toward efficiency and developing notation.

#### CONNECTIONS TO FUTURE CONTENT:

This is the final whole number operations unit in Grade 5. Students continue practicing multiplication and division throughout the year in homework, in practice pages, in Ten Minute Math activities, and by solving problems in different contexts in later units. Students apply their understanding of fractions (Unit 3), decimals (Unit 6), and the properties of multiplication and division as they work with multiplication and division of fractions and decimals (Unit 7).

#### MATH AT HOME:

- **Estimating Anytime:** You need to estimate amounts at home, try to involve your child. Look for ways to count or estimate large numbers of things, like floor tiles or window panes, or the number of cookies you'll need to make. Encourage your child to think of different ways to figure out about how many.
- **Modeling Division Situations:** Encourage your child to help you solve division problems that come up in your daily activities. For example, you might ask, "If you can buy 2 pencils for 29 cents, about how many can you buy for \$3.00?" or "I baked a batch of 137 muffins. I need to put them in

bags of 5. How many bags can I fill with 5 muffins in each bag? Are there any left over? What should I do with the leftovers?"

- **Estimating Large Products and Quotients:** Notice when you use multiplication and division in your everyday life and look for ways to estimate the answers with your child. Here is an example: "If you usually read 35 pages each day, about how long will it take you to finish the book you are reading now? Will it take more than a week?"
- Review the Math Words and Ideas videos for this unit on Savvas Site.