# 5 Math Unit 05: Divide Whole Numbers

Content Area:	Mathematics
Course(s):	
Time Period:	November
Length:	3 weeks
Status:	Published

# **Unit Overview**

Division in Grade 5 extends Grade 4 methods to two-digit divisors. Students continue to decompose the dividend into base-ten units and find the quotient place by place, starting from the highest place. They illustrate and explain their calculations using equations, rectangular arrays, and/or area models. Estimating the quotients is a new aspect of dividing by a two-digit number. Even if students round the dividend appropriately, the resulting estimate may need to be adjusted up or down. Sometimes multiplying the ones of a two-digit divisor composes a new thousand, hundred, or ten. These newly composed units can be written as part of the division computation, added mentally, or as part of a separate multiplication computation. Students who need to write decomposed units when subtracting need to remember to leave space to do so. How can you use place value to divide?

#### Goal

Students will be able to use place value to divide whole numbers.

**Students will be able to...** divide whole numbers

# Standards

MA.5.NBT.B.6

Find whole-number quotients of whole numbers with up to four-digit dividends and twodigit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.

## **Materials**

- EnVision Math
- 5-1 Use Patterns and Mental Math to Divide
- 5-2 Estimate Quotients with 2-Digit Divisors
- 5-3 Use Models to Divide with 2-Digit Divisors
- 5-4 Use Partial Quotients to Divide
- 5-5 Divide by Multiples of 10
- 5-6 Use Estimation to Place the First Digit of the Quotient
- 5-7 Divide by 2-Digit Divisors
- 5-8 Math Practices and Problem Solving: Make Sense and Persevere

- ST Math
- Happy Numbers
- <u>3 Act Lessons</u>
- Building Fact Fluency Kit
- Brainingcamp Manipulatives
- <u>Nearpod Lessons</u>
- Brainpop Resources
- <u>Math Diagnosis and Intervention System</u>
- Online Resources

## Technology

- 8.1.5.A.1,2,4 (solve problems, word processing, databases, spreadsheets)
- 8.1.5.F.1 (digital tools to support scientific finding)
- 8.2.5.C.1,2,3 (solve problems, troubleshoot repair tools)

## Assessment

#### **Formative Assessment**

- Teacher Observation
- Daily Quick Check
- Quizzes
- Exit Tickets

#### **Summative Assessment**

- Topic Tests
- Benchmark Tests
- Alternative Assessments: Performance Tasks & Projects

# **Accommodations & Modifications**

#### **Special Education**

- Follow IEP Plan which may contain some of the following examples...
- In class/pull out support with special ed teacher
- Additional time during intervention time

- Preferred seating
- Questions read aloud
- Extended time for completing tasks
- Graphic organizers
- Vocabulary support
- Mnemonic devices
- Songs/videos to reinforce concepts
- Limit number of questions
- Scribe
- Manipulatives
- Calculators
- Reteach pages
- Leveled homework
- Lesson intervention activities
- Math Diagnosis & Intervention System
- Another look homework video
- Practice buddy

#### 504

- In class/pull out support with special ed teacher Additional time during intervention time
- Preferred seating
- Questions read aloud
- Extended time for completing tasks Graphic organizers
- Vocabulary support Mnemonic devices
- Songs/videos to reinforce concepts Limit number of questions
- Scribe Manipulatives Calculators Reteach pages Leveled homework
- Lesson intervention activities
- Math Diagnosis & Intervention System Another look homework video
- Practice buddy

## ELL

- Translation device/dictionary
- In class/pull out support with ESL teacher
- Preferred seating
- Questions read aloud
- Extended time for completing tasks
- Graphic organizers
- Vocabulary support
- Mnemonic devices
- Songs/videos to reinforce concepts
- Manipulatives
- Math Diagnosis & Intervention System

#### At-risk of Failure

- Additional time during intervention time
- Questions read aloud
- Graphic organizers
- Vocabulary support
- Mnemonic devices

- Songs/videos to reinforce concepts
- Manipulatives
- Calculators
- Reteach pages
- Leveled homework
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#### **Gifted & Talented**

- Independent projects
- Enrichment pages
- Online games
- Leveled Homework
- Extension Activities
- Today's Challenge

# **Interdisciplinary Connections**

Topic 1 Math and Science Project - Using different presentations tools, students will collect different types of paper. Talk about the uses of

paper. Tell how strong each type of paper is. Tell how the paper feels. Tell if the paper can soak up water.

#### ELA:

NJSLSA.R10. Read and comprehend complex literary and informational texts independently and proficiently with scaffolding as needed.

#### Science:

3-5-ETS1-2. Generate and compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem.

# 21st Century Life Literacies & Key Skills

## **Critical Thinking and Problem Solving:**

Problem-solving activities starting with the lesson "Solve and Share" and ending with higher order thinking questions that utilize the mathematical practices

#### **Communication and Collaboration:**

Throughout the lesson, students are provided with opportunities to discuss their ideas as they investigate mathematical

## **Creativity:**

Students have opportunities to express their creativity by solving problems their own way, participating in performance tasks, and group projects.

### **Technology:**

Use of iPads, instructional apps, lab materials embedded in lessons. Programs such as BrainPop,Math Reflex, Google Slides are used to support instruction.

# **Career Ready Practices**

- CRP1. Act as a responsible and contributing citizen and employee.
- CRP2. Apply appropriate academic and technical skills.
- CRP4. Communicate clearly and effectively and with reason.
- CRP8. Utilize critical thinking to make sense of problems and persevere in solving them.
- CRP12. Work productively in teams while using cultural global competence.