# 6 Math Unit 04: Percents

Content Area: Mathematics

Course(s):

Time Period: December
Length: 13 days
Status: Published

#### **Unit Overview**

A major goal of this chapter is to describe percents as another way of representing fractions and decimals. More specifically, because the term percent means per one hundred, you can write percents as fractions or decimals. The terminology and notation may be new to students but the concept is not.

### **Standards**

MA.6.NS.C.7a	Interpret statements of inequality as statements about the relative position of two numbers on a number line diagram.
MA.6.NS.C.7b	Write, interpret, and explain statements of order for rational numbers in real-world contexts.
MA.6.RP.A.3	Use ratio and rate reasoning to solve real-world and mathematical problems, e.g., by reasoning about tables of equivalent ratios, tape diagrams, double number line diagrams, or equations.
MA.6.RP.A.3c	Find a percent of a quantity as a rate per 100 (e.g., 30% of a quantity means 30/100 times the quantity); solve problems involving finding the whole, given a part and the percent.

#### **Materials**

### **Big Ideas Math**

- 4.1 Percents & Fractions
- 4.2 Percents & Decimals
- 4.3 Comparing & Orders Fractions, Decimals & Percents
- 4.4 Solving Percent Problems

#### **Desmos**

Unit 3 - Percentages

- ST Math
- Delta Math
- 3 Act Lessons
- Brainingcamp Manipulatives
- Nearpod Lessons
- Brainpop Resources
- Online Resources

### **Technology**

- 8.1.5.AP.4: Break down problems into smaller, manageable sub-problems to facilitate program development.
  - 8.1.8.DA.1: Organize and transform data collected using computational tools to make it usable for a specific purpose.
  - 8.1.8.DA.5: Test, analyze, and refine computational models.

### **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
- Lesson intervention activities
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#### **Gifted & Talented**

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

## **Interdisciplinary Connections**

Topic 4 STEM Project - Design a Bridge

In this project, students design a bridge for their community from the task assigned in Topic 3. Students use the engineering design process to propose solutions.

Science Connection -

Students apply the engineering design process to find possible solutions to the problem identified. They develop models and determine similarities and differences among design solutions.

ELA: NJSLSA.R1. Read closely to determine what the text says explicitly and to make logical inferences and relevant connections from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.

Science: MS-ETS1-1. Define the criteria and constraints of a design problem with sufficient precision to ensure a successful solution, taking into account relevant scientific principles and potential impacts on people and the natural environment that may limit possible solutions.

# **21st Century Life Literacies & Key Skills**

- 9.4.8.GCA.2: Demonstrate openness to diverse ideas and perspectives through active discussions to achieve a group goal
- 9.4.8.IML.3: Create a digital visualization that effectively communicates a data set using formatting techniques such as form, position, size, color, movement, and spatial grouping
- 9.4.8.IML.4: Ask insightful questions to organize different types of data and create meaningful visualizations.
- 9.4.8.TL.1: Construct a spreadsheet in order to analyze multiple data sets, identify relationships, and facilitate data-based decision-making

• 9.4.8.TL.3: Select appropriate tools to organize and present information digitally.

# **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.