# MP3d-Subtract Within 1,000 Using Models and Strategies

Content Area: Mathematics
Course(s): Math 2

Time Period: Marking Period 3

Length: MP3 Topic 11 11-1 to 11-6

Status: Published

# **Essential Questions**

• What are different strategies for subtracting 3-digit numbers?

# **Big Ideas**

- **Mental Math:** Students will subtract numbers mentally by recognizing patterns in the tens and hundreds digits of the sums.
- Visual Models: Students will use models broken down by place value to subtract 3-digit numbers.
- Subtracting using an Open Number Line: Students will use open number lines to count back to subtract 3-digit numbers. Students will also use number lines to "add up" to subtract, relating subtraction to addition.
- Explaining Subtraction Strategies: Students can use the standard subtraction algorithm and other subtraction strategies to subtract 3-digit numbers. Students will use place value and properties of operations to explain which strategy works best in a specific problem.

# **Technology Integration**

8.1.2.AP.1: Model daily processes by creating and following algorithms to complete tasks.

#### Activity:

Students will use the Digital Math Tools and Activities in the Envision Kit. All students will use their chromebooks to practice subtracting three-digit numbers and recording their answers.

# **Enduring Understandings**

#### **Numbers and Operations in Base Ten**

- **2.NBT.A.1** Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones; e.g., 706 equals 7 hundreds, 0 tens, and 6 ones.
- **2.NBT.B.7.** (M) Add and subtract within 1000, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method. Understand that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones; and sometimes it is necessary to compose or decompose tens or hundreds.
- **2.NBT.B.8.** (M) Mentally add 10 or 100 to a given number 100–900, and mentally subtract 10 or 100 from a given number 100–900.
- **2.NBT.B.9.** Explain why addition and subtraction strategies work, using place value and the properties of operations.

# **Mathematical Practices Focus**

1. Make sense of problems and persevere in solving them.