Unit 3a-Understand Place Value

Content Area: **Mathematics**
Course(s): **Math 1**
Time Period: **Marking Period 3**
Length: **MP3 Topic 8 8-1 to 8-7**
Status: **Published**

Essential Questions

- How can you count and add using tens and ones?

Big Ideas

- Number Uses, Classification, and Representation: Numbers can be used for different purposes, and numbers can be classified and represented in different ways.
- Numbers and the Number Line: The set of real numbers is infinite and ordered. Whole numbers, integers, and fractions are real numbers. Each real number can be associated with a unique point on the number line.
- The Base-Ten Numeration System: The base-ten numeration system is a scheme for recording numbers using digits 0–9, groups of ten, and place value.
- Equivalence: Any number, measure, numerical expression, algebraic expression, or equation can be represented in an infinite number of ways that have the same value.
- Patterns, Relations, and Functions: Relationships can be described and generalizations made for mathematical situations that have numbers or objects that repeat in predictable ways. For some relationships, mathematical expressions and equations can be used to describe how members of one set are related to members of a second set.
- Practices, Processes, and Proficiencies:Mathematics content and processes can be applied to solve problems.

CSDT Technology Integration

8.1.2.DA.1 Collect and present data, including climate change data, in various visual formats.

Activity: Students will represent data of a two digit number on a tens and ones chart on a google slide.

Enduring Understandings

Number Operations in Base Ten

1.NBT.C Understand Place Value

1.NBT.B.2 Understand that the two digits of a two-digit number represent amounts of tens and ones. Understand the following as special cases: [M]

1.NBT.B.2a 10 can be thought of as a bundle of ten ones — called a "ten." [M]

1.NBT.B.2b The numbers from 11 to 19 are composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones. [M]

1.NBT.B.2c The numbers 10, 20, 30, 40, 50, 60, 70, 80, 90 refer to one, two, three, four, five, six, seven, eight, or nine tens (and 0 ones). [M]

1 NBT.A.1. Count to 120, starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral.

Climate Change

Technolgy: Cross-Curricular

8.1.2.DA.1: Collect and present data, including climate change data, in various visual formats.

- In this activity students will represent data of a two digit number on a tens and ones chart on a Google Slide activity using their Chrome Books.

Mathematical Practices

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

MP.2 Reason abstractly and quantitatively.

MP.3 Construct viable arguments and critique the reasoning of others.

MP.4 Model with mathematics.

MP.5 Use appropriate tools strategically.

MP.6 Attend to precision.

MP.7 Look for and make use of structure.

MP.8 Look for and express regularity in repeated reasoning.