

MP1a-Generalize Place Value Understanding

Content Area: **Math**
Course(s): **Math 4**
Time Period: **Marking Period 1**
Length: **MP1 Topic 1 1-1 to 1-5**
Status: **Published**

Essential Questions

- How are greater numbers written?
- How can whole numbers be compared?
- How are place values related?

Big Ideas

- **Read and Write Multi-Digit Whole Numbers:** Students read and write numbers using base-ten numerals, number names, and expanded form. Students will draw on these understandings throughout the topic.
- **Place-Value Relationships and Comparison:** Students use their understanding of place value to learn the generalization that the place value to the left of a given place is 10 times as great as that of the given place.
- **Round Whole Numbers:** Students use their understanding of place value to round whole numbers. They analyze the place values of digits and use that analysis to determine which multiple of 10, 100, 1,000, and so forth, a given number is close to.

Technology Integration

8.2.5.ED.3: Follow step by step directions to assemble a product or solve a problem, using appropriate tools to accomplish the task.

Activity:

Post an assignment in Google Classroom where students watch a Math Antics Place Value video to introduce the topic. Afterwards, students will complete a Google Classroom assignment to reflect on the video.

Cross-Curricular Integration

Integration Area: Social Studies

6.1.5.GeoPP.1: Compare and contrast characteristics of regions in the United States based on culture, economics, and physical characteristics to understand the concept of regionalism.

6.1.5.GeoPP.2: Describe how landforms, climate and weather, and availability of resources have impacted where and how people live and work in different regions of New Jersey and the United States.

Activity:

Compare population per square mile of different areas within NJ using a map and key (SS text pg 8).

Enduring Understandings

Number and Operations in Base Ten

4.NBT.A.1 [M] Recognize that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right. For example, recognize that $700 \div 70 = 10$ by applying concepts of place value and division.

4.NBT.A.2 [M] Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. Compare two multi-digit numbers based on meanings of the digits in each place, using $>$, $=$, and $<$ symbols to record the results of comparisons.

4.NBT.A.3 [M] Use place value understanding to round multi-digit whole numbers to any place.

Mathematical Practices Focus

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