

General Outcome:

• Develop number sense.

Specific Outcomes:

- Demonstrate an understanding of place value, including numbers that
 - greater than one million
 - less than one thousandth.

Introduction to Lesson



(1) 10 MINS

Teacher Background:

- Give students base ten blocks and number lines for the activity. Students can create their own number lines for reference as well. Have students represent the number 0.5, 100, and 1000 in as many ways as possible.
- Students can use pictures, numbers, words, manipulatives, or examples of where they have seen or heard these numbers before. Students should think of real-life examples and as many ways to represent that number as they can.
- · Log on to your

Teacher Console > Demonstrations > Concept Search.

- Enter thousand in Search bar.
- Show students the place value chart and how to place a numerical value in the proper columns.
- Students can make their own place value charts to use for reference when completing the rest of this lesson.
- Using the arrow for the next slide over, students will be able to see a visual of how base ten blocks can make up a whole number.
- In Concept Search, explore decimal system with students to show them how whole numbers become decimal numbers.

III ITEMS NEEDED

- ✓ Interactive whiteboard
- ✓ Mathletics teacher login
- ✓ Student handouts from eBooks
- ✓ Computers/tablets
- ✓ Base ten blocks
- ✓ Place value charts
- ✓ Chart paper
- **✓** Markers
- ✓ Abacus (if used in the classroom)

E ASSESSMENTS

- ✓ Observations
- ✓ Collaborative/group work
- ✓ Oral presentation
- ✓ Collect and assess place value charts

ACCOMMODATIONS/ **MODIFICATIONS**

- ✓ Allow students to use their own place value chart and base ten blocks to help read and represent whole numbers.
- ✓ Pair students in ability or leveled groups.

EXTENSION OF LEARNING

- Curriculum activities
- ✓ Year 6 eBook, "Reading and Understanding Whole Numbers," various
- ✓ Grade 6: Rainforest Maths, Numbers.
- ✓ Live Math Level 6
- ✓ Have students look up "abacus" in the Concept Search section of their Student Console and interact with this concept.



The Lesson



Reading and

Understanding

Whole Numbers

Teacher Background:

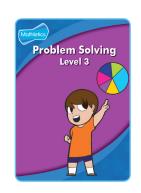
Students should have created their own place value charts prior to this lesson, or they should be given a handout of a place value sheet.

eBooks—Read and Understand Numbers (Ordering)

- For this math game, students will each need a printed handout from **eBook > Year 6 > Reading and Understanding Whole Numbers**, Read and understand numbers section, page 4, question 3. A copy should be made for every student. Students should be placed in or choose a group of four for this activity.
- Every student will need a set of the digit cards. Students can practice making the largest numbers they can. As an extension to this activity, have students place their numbered cards in their place value charts. Students should say the word aloud to obtain the points.

Open-Ended Problem Solving—Some Really Big Numbers

- Option 1—Display the problem solving questions, one at a time, on the interactive whiteboard. Log in to your Teacher Console > eBooks > Problem Solving > Problem Solving Level 3 > Open-ended problem solving > Some really big numbers.
- Have students work collaboratively to determine a solution to the problems. Students should write the number in their place value charts. Students should write in words the whole number. Students can then try the real-life problem and begin determining strategies to find a solution.
- Option 2—Using the same activity as above, print out the handout from the Problem Solving eBook
 and distribute to partners. Students should work on one of the three open-ended problem solving
 questions. Partners should show their work for each problem, writing the whole number in both words
 and numerically. Have students write their responses on chart paper and share with the class.



After the lesson



3. 2. 1

How It Works: 3 things you have learned, 2 things you have questions about, 1 thing you want the teacher to know. Students can share their 3, 2, 1 response orally, through discussion, or you can provide an exit slip (sticky note) and have students post these before the class ends.