PLACE VALUE OF NUMBERS

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Subject

Mathematics

Prepared By

[Instructor Name]

Grade Level

3

Overview

This lesson plan covers teaching content for:

1. Recognize the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones)
2. Order and compare numbers beyond 1000
3. Identify, represent and estimate numbers using different representations
4. Round any number to the nearest 10, 100 or 1000
5. Solve number and practical problems that involve all of the above and with Increasingly large positive numbers

Objectives

At the end of the class, the students should be able to;

1. demonstrate their understanding of place value to create, read, and decompose large numbers.
2. identify the value of each digit in a given number from ones to millions.

Activity Starter/Instruction

1. Ask a few volunteer students to come to the board and write down the largest number that they can think of and read aloud. Many students will want to put endless numerals on the board, but being able to read the number aloud is a more difficult task
2. Bring the students, with their math journals and a pencil, to the class meeting area. Tell them to place their supplies on the floor next to them.
3. Ask students to turn and talk to a partner about the term place value. Allow them to utilize their math journals to create an image or chart to help them explain what they know.
4. Tell the students that today they're going to learn how to determine the place and the value of each digit in a number and round to the nearest 10 or 100.

Teacher Guide

Day 1/ Lesson 1: 15 Mins

1. Begin with showing a number and asking learners what the number is.
2. The learner reads out the number. Ask the learner how many digits the number has.
3. In this case the number is 5,482,221 and it has 6 digits.
4. Teach the learners to read the millions, hundred thousands, ten thousands, thousands, hundreds, tens and units from left to right.
5. Let them see how this is done by standing in front of the class with your back to the class. Show them from side to side.
6. A clear understanding of the position of the hundred, the tens and the units is needed.

Materials Required

- Journal
- Pencil
- Cardboard Paper
- Marker
- Place Value worksheet

Additional Resources

- https://betterlesson.com/lesson/495665/state-your-name-place-value-to-millions
- https://www.education.com/lesson-plan/what-is-my-place-value/
- https://www.education.com/lesson-plans/?cid=11.2145
- https://www.mathcoachscorner.com/2012/08/place-value-reading-large-numbers/
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Additional Notes

Teacher Guide

Day 2/ Lesson 2: 15 Mins

1. Next, tell the students that we will insert the digits of our number, here we are using 3,611,264, in the space provided, as follows:

2. Finish determining the place and value of the digits in the above number with student participation. Ask prompting questions to get students discussing and showing their understanding. (e.g., What is the place of the "6" in the number given? Answer: 10s; What is the value of the "2" in the number given? Answer: 200; What are the place and the value of the first "1" in the number given? Answers: 10,000s and 10,000)

3. Tell students that they will now take the same number and round it to the nearest 10 and 100. Think aloud about the rules for rounding and the example.

Teacher Guide

Day 3/ Lesson 3: 20 Mins

1. Each place holds 1 digit from 0 – 9
2. Each digit has a value
3. You must start in the greatest place when writing the expanded form
4. Every word that you say when you read a number, must be written for the word form
5. You can use a place value chart to help write numbers in expanded form.
6. Let's Practice. Write 153,278,921 in expanded and word form.
7. The expanded form of this number is 100,000,000 + 50,000,000 + 3,000,000 + 200,000 + 70,000 + 8,000 + 900 + 20 + 1
8. Use the periods to help you say the number. The numbers 153 are in the millions period, so you say one hundred fifty-three million. The 278 is in the thousands period, so you say two-hundred seventy-eight thousand. The 921 is in the ones period, so you say nine hundred twenty-one.
9. For the word form, you write every word that you say.
10. The word form for this number is one hundred fifty-three million, two-hundred seventy-eight thousand, nine hundred twenty-one.
11. Now you will practice using a place value chart to write the expanded and word forms of numbers.

Guided Practice

Day 4/ Lesson 4: 20 mins

1. Tell students to pick up their math journals and pencils and write down and solve for the place and the value of the digits in the following numbers: 10,604 and 1,360, using the format discussed above.
2. Ask for volunteers to raise their hands and share with the class the steps involved, based on the numbers used.
3. As the place and value of each digit in each number is determined aloud by the class, write down the steps volunteered by the students on the whiteboard.
4. When the place and value for each digit is determined in both numbers, review it with the class for accuracy.
5. Make sure everyone has the solution for determining the place and value of each digit, in each number given, as a reference for completing their assignment during independent work time.
6. Have students use the same numbers and round them to both the nearest 10 and 100. Discuss as a class and have students share their steps.

Assessment Activity	Assessment Activity	Assessment Activity

Assessment Activity

1. Send students back to their seats and hand out a copy of the Place Value worksheet to each individual.
2. Walk around and observe the students as they work on completing the assignment. Monitor the students as they work, making sure the problems are done correctly, in that they are justifying their answers by showing their work in coming up with the place and value of each digit, in each number assigned.
3. Ask questions of the students, to make sure they understand the concept of place and value of each digit in a number. Provide support and clarification as needed.

Assessment Activity

1. Instruct students to round each number to the nearest 10 and 100 on the back of the worksheet.

2. The students will be assessed based on the comments and feedback from them during the lesson, about the assignment problems and at the conclusion of the lesson.

3. They will also be assessed based on the results of the completed problems assigned

Summary

Review and Closing

1. Bring the students back to the class meeting area.
2. Ask for volunteers to share their answers and work done to complete the problems assigned.
3. As the problems are reviewed in front of the class, the students will check their answers for accuracy.
4. After each problem has been checked for accuracy, ask the class if there are any questions or comments on determining the place and value of digits within a given number.
5. Ask the students if there are any questions or comments about determining the place or value of a digit in a number