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LESSON 1

Numeration



Materials Needed

- large index cards with place value names written on them
- calculators
- copies of place value fill-in chart (page 7)
- large index cards with the numbers 1-10 written on them
- two empty boxes or baskets
- real estate photos of homes (page 8) or other real estate images



Student Goals

- Understand that each digit in a number has a place value.
- Read and write numbers with place values up to one million.
- Use calculators to form larger numbers.



Procedure

1. Write a number on the board with six places. An example is 123,471.
2. Show students the place value cards posted on the board or other visible location.
3. Ask students to find the number in the ones place and post the correct card by it. Repeat for all place values in the number (hundreds place, tens place, etc.).
4. Ask students to read this number aloud.
5. Point out the comma and explain how it is placed within appropriate numbers.
6. Write 2,397. Ask students to read this number aloud.

7. Write 68,900. Ask students to read this number aloud.
8. Write 398,045. Ask students to read this number aloud.
9. Have students take out calculators.
10. Explain that we can use calculators to create larger numbers.
11. Direct students to enter the following information into their calculators:
 - Press 3. Then clear.
 - Press 2, 3. Then clear.
 - Press 4, 2, 3. Read the number.
 - Press 6, 4, 2, 3. Read the number.
 - Press 7, 6, 4, 2, 3. Read the number. Then clear.
 - Keep going if the students understand the ten thousands place.
 - Press 1, 7, 6, 4, 2, 3. Read the number. Then clear.
 - Press 5, 1, 7, 6, 4, 2, 3. Read the number. Then clear.
12. Play the Valuable Numbers game. Use the number index cards and place value index cards. Place each set of cards into a separate box or basket.

How to Play:

1. Have three students come up and draw a card from each box.
2. Students must write the number on their Place Value Fill-In Chart as the students read their cards. Use zero for any missing place values. For an example, the following cards are drawn: 3, thousands, 7, ones, 6, and ten thousands. The rest of the class should write 63,007.
3. Have several students write their number on the board.
4. Make any corrections together.
5. Continue practicing and give all students the chance to draw cards.

LESSON 1

Numeration

Follow-Up Activity: The Real Estate Game

Student Goals

- Figure differences between large and small sums.
- Work cooperatively to compare numbers up to millions.
- Realize how large sums relate to everyday life.

Procedure

Part 1

1. Ask students if they know what real estate is.
2. Explain the concept of owning a house that has a specific value.
3. Give each child a picture of a house with its cost. Pass the cards out facedown. Divide the class into small groups.
4. Explain to the class that their goal, along with their teammates, is to decide how to put the houses in order from most expensive to least expensive (or vice versa). Students should record their answers on a piece of paper.
5. Allow 10 minutes for groups to discuss, order, and record the prices.
6. Ask each group to present their order of prices to the rest of the class. Assist those having difficulty. Encourage students that grasp the concept to help explain it to others.

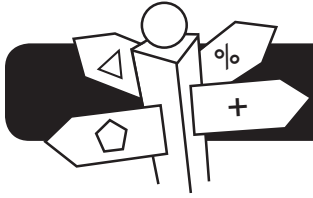
Part 2

1. Ask each group to find the difference between the most expensive and least expensive houses.
2. Explain that to do this, students must subtract the lowest number from the highest number using a calculator (or, for a challenge, on paper).
3. Have each group read their answer out loud. Check answers on the board with the entire class.



Name _____

Date _____



PLACE VALUE FILL-IN CHART

millions	hundred thousands	ten thousands	thousands	hundreds	tens	ones
millions	hundred thousands	ten thousands	thousands	hundreds	tens	ones
millions	hundred thousands	ten thousands	thousands	hundreds	tens	ones
millions	hundred thousands	ten thousands	thousands	hundreds	tens	ones



\$569,481
4 Bedrooms, 2 Story



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Raised Ranch with
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\$974,016
4 Bedrooms, 2 Baths,
Family Room



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3 Bedroom Ranch



\$1,006,479
Stylish Contemporary



\$2,436,000
Victorian