Place Value Smorgasbord

Task 3 - Gina's Solution

Gina said, "Forty-six multiplied by 10 is 460 because when you multiply a number by ten, you add a zero to the end of it."

Do you agree or disagree with Gina? Explain your reasoning. Give at least one example to support your reason.

Task 7: Newspapers

A local newspaper prints 1,800 copies each day. How would you evenly divide the newspapers into smaller, manageable stacks?

Place Value Smorgasbord

Materials:
- Task cards
- Place value tools
- Paper and pencil to record thinking

Directions:
1) Students will work with a partner.
2) Partner 1 chooses a task card. Both partners read it together, but they both solve it <u>independently</u> being sure to show their thinking.
3) Partners share their solutions and strategies.
4) Partner 2 chooses a task card, and steps 2-3 are repeated.

Task 1 - The Yankees and Dodgers

1. The chart below shows the number of people who went to see the New York Yankees play baseball between 2001 and 2006. Use the information on the chart to answer questions a–d below.

100 Millions	10 Millions	Millions	100 Thousands	10 Thousands	Thousands	Hundreds	Tens	Ones
	2	2	2	6	2	5	6	4

a How many people watched the New York Yankees play baseball between 2001 and 2006? Write the number here with the commas placed correctly.

b Now write the number out in words, the way you'd read it over the phone.

c Are there any ten millions in this number? If so, how many?

d The digit in the hundreds place is

2. Did more people go to Dodgers or Yankees games between 2001 and 2006? Write the numbers on the lines below. Then put a greater than (>) or less than (<) symbol between them to compare the two.

_____ ◯ _____
Dodgers   Yankees

Task 2 - Big Numbers

1 Each weekend, Dylan and his dad go fishing. Dylan checks the odometer reading before each trip and records it in their mileage book. (An odometer is an instrument on the dashboard of a car that tells how far you've driven altogether.) Put these readings in the order that they would appear in the book, from least to greatest. The first one has been done for you.

- 93,102
- 89,776
- 95,004
- 91,204
- 90,089
- 91,438
- 99,173

89,776

2a Look at the following numbers. Circle the number that is the closest to 60,034.

60,000   60,100   60,200   60,300

b Circle the number closest to 194,321.

190,000   191,000   192,000   193,000   194,000   195,000

c Circle the number closest to 233,904.

230,000   231,000   232,000   233,000   234,000   135,000

3a Amanda is sure she got the high score on a video game But she's not sure what the number is. Please write it down for her.

She scored nine hundred forty-three million, two hundred sixty-one thousand, five hundred eighty-six.

b Caleb is positive he beat her score. His score was 925,298,199. Who got the highest score? How do you know?

Task 3 - Gina's Solution

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Do you agree or disagree with Gina? Explain your reasoning. Give at least one example to support your reason.

Task 4 - Packaging Soup Cans

There are 202 soup cans in the factory. A crate will hold 200 cans. A case will hold 20 cans. The rest of the cans go into individual boxes. The factory want to use as few packages as possible.

1. How many crates, cases, and individual boxes will you need to hold the 202 soup cans?

2. If you only had cases and individual boxes, how many of each would you need?

3. If you only had individual boxes, how many would you need?

4. What did you notice about the number of crates and cases in #1 compared to #2? Explain your reasoning.

Task 5 - Value of the Bills

Part 1:
Gina said, "In my pocket, I have 25 of the same amount of dollar bills." What is the value of Gina's money if she has:
   a) 25 one dollar bills
   b) 25 ten dollar bills
   c) 25 hundred dollar bills

Part 2:
Gina reasoned, "The value of the 2 when I have ten dollar bills is 200, but the value of the 2 when I have one dollar bills is only 20." Is Gina correct? Why or why not?

Part 3:
Consider parts a, b, and c above if you had 260 of the same amount of dollar bills. What would the value of the bills be? Explain how you found your answer.

Task 6: Juice Pouches

Juice pouches are packaged in different ways. A box holds 10 pouches. A case holds 10 boxes. A crate holds 10 cases.

Some students bring in juice boxes for Field Day. The information is below.
Miguel - 1 crate, 12 cases, 3 boxes, and 6 pouches
Aaron - 1 crate, 13 cases, 17 boxes, and 2 pouches
Sarah - 1 crate, 12 cases, 2 boxes, and 17 pouches
Vicky - 1 crate, 14 cases, 6 boxes, and 9 pouches

1. If each person were going to reorganize their drink pouches to use as many of the larger containers as possible, and so that there are no more than 10 of each type of container, how many of each container would each of them need?

2. How many total drink pouches does each student have? Explain how you found your answer.

3. List in order from the student who had the most juice pouches to the student with the smallest number of juice pouches.

Give it a try!

If all of the boxes were going to be split evenly among the 6 grades at the school, how many boxes would each grade get? Would there be any leftovers?

Task 7: Newspapers

A local newspaper prints 1,800 copies each day. How would you evenly divide the newspapers into smaller, manageable stacks?

Task 8: Enough's Enough

Jordan needs 1,440 miniature erasers to give out as prizes at the carnival. The erasers are sold in boxes of 50 each. Will Jordan have enough erasers if he buys 28 boxes? Show your reasoning mathematically and with an illustration.
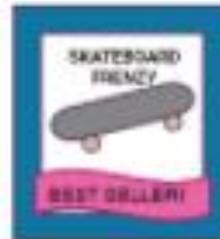
What value will the numbers have when rounded to different places?

If the website said that there was a tie, to what place value do you think they rounded?

Video Game Sales

Skateboard Frenzy	Rapid Racing
203,947	203,579

Graphics and Fonts