

Fraction and Decimal Concepts

These activities extend the puzzles and the concepts learned in the puzzles throughout the week. The activities might be tasks, word problems, journal writing activities, or hands-on activities designed to deepen student understanding and help students make connections.

Some of the activities listed below work well in a remote environment and can be easily added to your virtual classroom. The activities that can be used remotely are designated as such.

| | Give students whiteboards and dry erase markers. Display a puzzle from Level 2. Work as a class to place both parts of the puzzle (the fraction and the decimal). Pause the puzzle before JiJi crosses the screen for a second time. Say to students, "Look at the fraction and decimal that are placed on this number line. Which one is greater? How do you know?" Have students work with a parter to prove their answer. Discuss their solutions and focus the discussion on using the number line to compare the fraction and decimal. Ask students to record their comparison using >, <, or = (e.g., 9/10 is closer to 1 than .2, so 9/10 > .2). Repeat with the remaining puzzles in Level 2. |
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| | Give students whiteboards and dry erase markers. Display the first puzzle in Level 4. Ask students to name the decimal shown using number words and expanded form. Share student solutions. Then say to students, "This decimal can also be written as a fraction. On your whiteboard, write this decimal as a fraction." Then write an equation that shows that the decimal in the puzzle and the fraction students wrote are equal. Ask students, "How could we prove these two are equal? Work with a partner to prove these two are equal." Share students' solutions. Repeat with other puzzles in Level 4. |
| 0.55 | Display a puzzle from Level 6. Discuss the fraction or decimal shown and the number line underneath. Give students whiteboards and dry erase markers. Ask students to work with a partner to plot the given fraction/decimal on the number line and then add two more fractions/decimals to the number line that are GREATER than the given number in the puzzle and two more fractions/decimals to the number line that are LESS than the given number in the puzzle. Share solutions as a whole class and discuss how to prove the relationships between the fractions and decimals. Repeat with another puzzle in Level 6. |
| 6×10 + 5×1 + 8×1/10 + 1×1/100 | Give students whiteboards and dry erase markers. Display a decimal in expanded form and ask students to write it in standard form. (For example, display 2x10 + 7 x 1 + 8 x 1/10 + 4 x 100. Students should answer 27.84.) After students have written the number in standard form, ask them to write a decimal that would be greater than the number and less than the number. Share students' solutions. Then ask students to write the fraction that would be equal to the original decimal. Repeat with other decimals, including decimals to the thousandths. |
| PUZ2.1 TALK Classroom Extensions Pre-Work Name: Date Solve 321 x 45 using two different strategies? | • If you are using Puzzle Talks as part of your remote learning plan, it is important to think about how to maximize the learning in the virtual environment. One strategy might be to do Pre-Work. Pre-Work encourages students to think about the concept prior to the Puzzle Talk. |

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Fifth Grade



| Name: |
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Date:_____

What happens to the value of a number as you move to the right of the decimal point? How could you use a drawing or model to prove this?

Is 34.6 = 30 + 4 + 6/10? Why or why not?

Jaela filled two different beakers with water for a science experiment. The first beaker has 30.68 mL of water. The second beaker has 30.52 mL of water. Which beaker has the least amount of water? Explain.