

Fraction Equivalence and Ordering

Fourth Grade

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.

$\begin{array}{c c} 1\\ \hline 1\\ \hline 2\\ \hline 4\\ \hline 4\\ \hline 4 \end{array}$	 Create sets of 4 fraction cards. Write 4 different fractions on notecards. The fractions should have ½, 1 and two other fractions that do not have a common denominator (but one can be found by students). Put students into groups of 4 and give each group a set of fraction cards. Ask students to compare the fractions in their set and then line up holding the fraction cards in order from least to greatest. Check student groups as a whole class and determine how to prove if students have lined up correctly.
$\frac{4}{4}, \frac{0}{4}, \frac{4}{1}$	 Display the following fractions: 4/4, 4/1, 0/4. Give students whiteboards, dry erase markers and math tools, such as Cuisenaire rods, fraction strips, etc. Ask students to compare these fractions and place the fractions on a number line. Have students work with a partner or in a small group. Share students' thinking and number lines. Ask, "What do you know about a fraction with the same number for the numerator and denominator? What does it mean to have a denominator of 1? What does it mean to have a numerator of 0?" Look at the completed number lines and use the number line to rewrite both fractions as whole numbers.
	 Give students fraction tools, such as Cuisenaire rods, fraction strips, whiteboards and dry erase markers. Display the first puzzle in Level 4. Ask students, "What is different about this puzzle and the other puzzles we have solved?" Students should note that the puzzle has 3 fractions that do not all have like numerators or denominators. Have student use their fraction tools to determine the order of the fractions from least to greatest. Have students share their strategies for comparing the fractions (e.g., Did they use an equivalent fraction? Did they decide if one of the fractions was closer to 0, ½ or 1?). Repeat with the remaining puzzles in Level 4.
EVEZLE TALK Classroom Enhanced Student Work Mame: Date: Dat	 Pose the following problem to students: Isabella baked a pan of lasagna for her family of 4. She cut the lasagna into 8 equal pieces. Explain how much lasagna each family member might eat. Write equations and/or inequalities to compare how much each family member ate. Have students work with a partner and use fraction tools to solve the problem. Share students' solutions and strategies as a whole group. <i>(Can be used remotely)</i>
VIZZLE 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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Name:	Date:
	- 410.

How does a number line help you compare fractions?

How do you know if two fractions on a number line are equivalent?

Mary was cleaning up her craft room. She found $\frac{1}{2}$ gallon of blue paint. $\frac{3}{4}$ gallon of red paint. $\frac{2}{8}$ gallon of purple paint. Order the paint colors from the least amount of paint to the most amount of paint. Place the fractions on a number line.