

Fifth Grade

## Addition and Subtraction With Decimals

Estimate Addition and Subtraction on Number Line

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.

Ribbon 1 Ribbon 2 Ribbon 3 Ribbon 4	3.4 inches .9 inches 4.2 inches 1.6 inches	<ul> <li>Pose word problems that involve adding and subtracting decimals.</li> <li>For example: <ul> <li>After a craft project, Joanna had different lengths of ribbon left. She measured the length of each ribbon and recorded the data in the table below. How much ribbon does Joanna have in all?</li> </ul> </li> <li>(Can be used remotely)</li> </ul>
0.19-0.1		<ul> <li>Give students whiteboards, dry erase markers, and 3 notecards. Have students write "0", "1" and "1/2" on the notecards. Display the first puzzle in Level 4.</li> <li>Ask students to look at the problem displayed and estimate if the final answer will be closer to 0, ½ or 1 and hold up the corresponding notecards. Look at the students' answers as a class and discuss why students chose their estimate.</li> <li>Then have students use their whiteboards to line up the decimals and solve the problem. Compare the actual answer to the estimate. Repeat with other puzzles in Level 4.</li> </ul>
	< 1	<ul> <li>Put students into pairs. Give each student a whiteboard, dry erase marker, 3 notecards and a number cube.</li> <li>Have students write "&lt;", "&gt;" and "=" on the notecards. Have each partner roll their number cube 2 times and use the numbers rolled to make a decimal to the hundredths place.</li> <li>Students compare the two decimals and use the symbols on the notecards to state the inequality. Have students prove their answers and then have them roll the number cubes again and repeat the activity.</li> </ul>
		<ul> <li>Give students whiteboards and dry erase markers. Have students draw a 0 – 10 number line.</li> <li>Have students represent addition and subtraction problems involving decimals on a the number line showing the results as jumps on the number line.</li> <li>After students solve each problem, look at the completed number lines together. Talk about the size of the jumps and how what they know about each decimal determined the size of the jumps (e.g., "I know that .4 is almost one half, so 3 + .4 would end up about in the middle of 3 and 4.").</li> </ul>
Pre Class Pre Name Solve 321 x 45 using two different stra	E TALK com Extensions Nork Date: Lagies?	• 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.



Name:	Date:

After a craft project, Joanna had different lengths of ribbon left. She measured the length of each ribbon and recorded the data in the table below. How much ribbon does Joanna have in all?

Ribbon 1	3.4 inches
Ribbon 2	.9 inches
Ribbon 3	4.2 inches
Ribbon 4	1.6 inches



Name:	Date:

Look at these two problems: 4.9 x 2.8 and 3.1 x 4.1. Using only estimation, which product do you think is larger? Why?

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

Example Problem: Myla has a collection of ribbon in her craft room. She has ribbon that is 3.8 inches long, 2.2 inches long, 12.7 inches long and 1.1 inches long. Use estimation to determine how much total ribbon Myla has.