








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.

  	<ul style="list-style-type: none"> • Give students a 0 – 1 Number Line Math Mat and dry erasemarkers. • Tell students we are going to play the game “What Am I Closer To?”. Explain that you will display a fraction and they need to decide before partitioning and placing the fraction on the number line whether the fraction would be closer to 0, $\frac{1}{2}$ or 1. • Display the fraction $\frac{7}{8}$ and ask students to make a prediction. Have students share their prediction with a partner and then the whole class. Have students share their reasoning (e.g., I know $\frac{4}{8}$ is equal to $\frac{1}{2}$ and this is more than $\frac{4}{8}$ or I know I only need one more eighth to have 1). • Have students partition and place the fraction to check students’ answers. Repeat with other fractions.
 <p>Name: _____ Date: _____</p> <p>Mrs. Ritzman had her students draw a 0-6 number line on their whiteboards. She then asked her students to mark $\frac{1}{2}$ on the number line using a circle. When she looked around the classroom, a lot of students had incorrectly place the circle on the number 3. What mistake did the students make? Explain.</p>	<ul style="list-style-type: none"> • Pose the following question to students: <ul style="list-style-type: none"> ○ Mrs. Ritzman had her students draw a 0-6 number line on their whiteboards. She then asked her students to mark $\frac{1}{2}$ on the number line using a circle. When she looked around the classroom, a lot of students had incorrectly place the circle on the number 3. What mistake did the students make? Explain. • Have students work with a partner or small group to try to analyze the students’ error. Share students’ thinking as a whole group. Discuss how Mrs. Ritzman’s students marked half of the number line (3 is half of 6) and not the location of the number $\frac{1}{2}$. • Ask students, “Where is half of the number line?” Remind students that because numbers (and number lines) go on forever there is no half of the number line. $\frac{1}{2}$ is a number that is always located halfway between 0 and 1. (Can be done remotely)
 <p>Name: _____ Date: _____</p> <p>Look at the following fractions: $\frac{1}{2}$, $\frac{2}{3}$, $\frac{3}{4}$, $\frac{4}{5}$. Which fraction is closest to 1? Use a number line to prove your answer.</p>	<ul style="list-style-type: none"> • Give students a whiteboard and dry erase marker. • Pose the following problem to students: <ul style="list-style-type: none"> ○ Look at the following fractions: $\frac{5}{6}$, $\frac{3}{4}$, $\frac{2}{3}$, $\frac{10}{9}$. Which fraction is closest to 1? Use a number line to prove your answer. • Have students work with a partner to solve the problem and represent the problem on the number line. Have students share their solutions with the whole class. • Discuss with students that each fraction is one fraction piece away from 1. It’s the size of the fraction piece that determines which fraction is closer to 1.
 <p>Name: _____ Date: _____</p> <p>The following fractions fell off of the number line in Mrs. Gaston’s classroom: $\frac{1}{8}$, $\frac{4}{8}$, $\frac{10}{8}$, $\frac{1}{2}$. Show the number line to help Mrs. Gaston determine where to put the fractions back on her number line so her number line is correct.</p>	<ul style="list-style-type: none"> • Pose the following problem to students: <ul style="list-style-type: none"> ○ The following fractions fell off of the number line in Mrs. Gaston’s classroom: $\frac{1}{8}$, $\frac{4}{8}$, $\frac{10}{8}$, $\frac{1}{2}$. Show the number line to help Mrs. Gaston determine where to put the fractions back on her number line so her number line is correct. • Have students work with a partner and create a number line to represent Mrs. Gaston’s number line. Have students’ share their strategy for placing the fractions. When all of the fractions have been placed, ask students, “Where would the fraction $\frac{1}{4}$ go?” (Can be done remotely)
 <p>Name: _____ Date: _____</p> <p>Solve 321×45 using two different strategies?</p>	<ul style="list-style-type: none"> • 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.



Student Work

Name: _____

Date: _____

Mrs. Ritzman had her students draw a 0-6 number line on their whiteboards. She then asked her students to mark $\frac{1}{2}$ on the number line using a circle. When she looked around the classroom, a lot of students had incorrectly place the circle on the number 3. What mistake did the students make? Explain.



Student Work

Name: _____

Date: _____

Look at the following fractions: $\frac{5}{6}$, $\frac{3}{4}$, $\frac{2}{3}$, $\frac{10}{9}$. Which fraction is closest to 1? Use a number line to prove your answer.



Student Work

Name: _____

Date: _____

The following fractions fell off of the number line in Mrs. Gaston's classroom: $\frac{1}{8}$, $\frac{4}{8}$, $\frac{10}{8}$, $\frac{1}{2}$. Show the number line with these fractions to help Mrs. Gaston determine where to put the fractions back on her number line so her number line is correct.



PUZZLE TALK
Extensions
Pre-Work

Name: _____

Date: _____

Can more than one fraction be at the same spot on a number line? How do you know?

How can you use a number line to compare fractions? Explain.

Place the following fractions on a number line: $\frac{4}{4}$, $\frac{8}{8}$ and $\frac{2}{2}$. What do you notice about the completed number line? Explain.