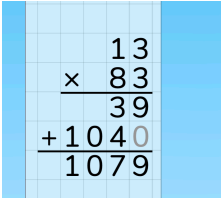
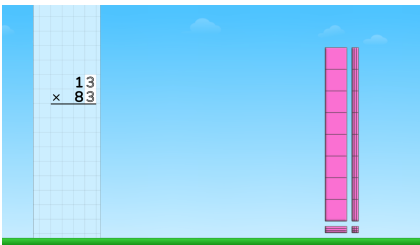





These activities extend the puzzles and the concepts learned in the puzzles throughout the week. The activities might be tasks, word problems, journal writing activities, or hands-on activities designed to deepen student understanding and help students make connections.

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"> • Explain to students that the puzzles model the standard algorithm. Ask students if they have ever used other strategies to complete multi-digit multiplication problems. • Give students a multi digit multiplication problem. Have students solve the problem using the standard algorithm and another strategy, such as the area model. • Have students explain what each number represents in the standard algorithm strategy and in the other strategy they used. Repeat with another multi-digit multiplication problem.
	<ul style="list-style-type: none"> • Give students whiteboards and dry erase markers. Show a puzzle from Level 4. • Have students write the expression that each section of the area model represents (e.g., 20×40 for the large squares). • Have students share and record the expressions, putting them together at the end of the puzzle to find the solution. Repeat with the remaining puzzles in Level 4.
 Student Work Name: _____ Date: _____ The Pens, Pens, Pens Company packs their boxes of pens into a crate to ship their pens to their customers. Each box of pens holds 24 pens. Each crate holds 36 boxes of pens. How many total pens are in each crate? Explain.	<ul style="list-style-type: none"> • Pose story problems involving multi-digit multiplication. • For example: <ul style="list-style-type: none"> ◦ The Pens, Pens, Pens Company packs their boxes of pens into a crate to ship their pens to their customers. Each box of pens holds 24 pens. Each crate holds 36 boxes of pens. How many total pens are in each crate? Explain. • Have students solve the problem and share their solutions and strategies. (Can be used remotely)
	<ul style="list-style-type: none"> • Have students find a partner. Give each pair of students whiteboards, dry erase markers, two number cubes and two notecards. • Have students write “standard algorithm” on one notecard and “area model” on the other notecard. Have each pair roll their number cube to make a three-digit number and then a two-digit number. • Have partners set up the two numbers as a multiplication problem and then have partners each draw a notecard. One partner will use the standard algorithm to solve the problem and the other partner will use the area model to solve the problem. • Have partners compare their solutions and strategies. Have partners roll again and repeat.
 Pre-Work Name: _____ Date: _____ Solve 321×45 using two different strategies?	<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.



PUZZLE TALK
Extensions

Student Work

Name: _____

Date: _____

The Pens, Pens, Pens Company packs their boxes of pens into a crate to ship their pens to their customers. Each box of pens holds 24 pens. Each crate holds 36 boxes of pens. How many total pens are in each crate? Explain.



Pre-Work

Name: _____

Date: _____

Solve 321×45 using two different strategies?

What are the advantages and disadvantages of using a traditional (or standard) algorithm?

On the shelf in the supply closet there are 38 boxes of pens. If each box of pens contains 24 pens, how many total pens are on the shelf in the supply closet?
Show your work.