PUZZLE TALK
Extensions

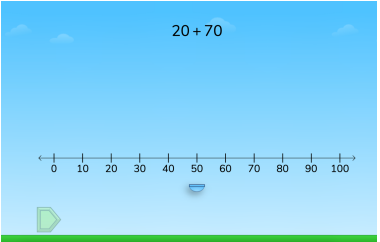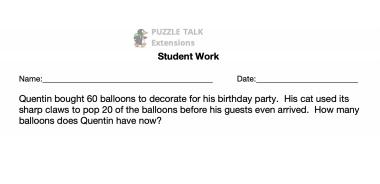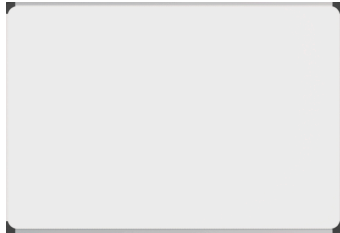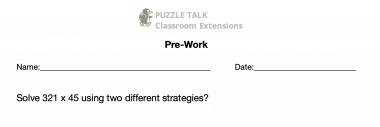| First Grade | Adding and Subtracting by Tens | Addition and Subtraction On the Number Line |

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.

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$50 + 10$

0 10 20 30 40 50 60 70 80 90 100
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- Project the first puzzle from Level 3.
- Have students draw an open number line to represent an addition or subtraction problem involving tens.
- Talk as a class about student answers and strategies.
- Repeat with the remaining puzzles.
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$20 + 70$

0 10 20 30 40 50 60 70 80 90 100
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- Project a puzzle from Level 3.
- Ask students to talk with a partner and create a story problem to go with the equation they see in the puzzle.
- Choose one problem to solve as a class.
- Discuss strategies for students' solutions.
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PUZZLE TALK
Extensions
Student Work

Name:_____ Date:_____

Quentin bought 60 balloons to decorate for his birthday party. His cat used its sharp claws to pop 20 of the balloons before his guests even arrived. How many balloons does Quentin have now?
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- Pose the following problem to students:
  - Quentin bought 60 balloons to decorate for his birthday party. His cat used its sharp claws to pop 20 of the balloons before his guests even arrived. How many balloons does Quentin have now?
- Ask students to use an open number line to solve this problem.
- Share answers and strategies as a class.
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- Post the following problems: $2 + 7$ and $20 + 70$.
- Ask students, "How are these two expressions the same? How are they different?"
- Explain to students that 0 is a powerful number. It can make a number 10 times bigger.
- Display the answer to the expressions as "$2 + 7 = 9$ or 2 ones and 7 ones make 9 ones, $20 + 70 = 90$ or 2 tens and 7 tens make 9 tens."
- Ask students, "What do you think that $200 + 700$ is equal to? Why?" Write out "2 hundreds plus 7 hundreds is _____ hundreds."
- Talk about the pattern students see. Ask, "What is $2000 + 7000$? How do you know?"
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PUZZLE TALK
Classroom Extensions
Pre-Work

Name:_____ Date:_____

Solve 321 x 45 using two different strategies?
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- **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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PUZZLE TALK
Extensions
Student Work

Name: _____   Date: _____

Quentin bought 60 balloons to decorate for his birthday party. His cat used its sharp claws to pop 20 of the balloons before his guests even arrived. How many balloons does Quentin have now?

PUZZLE TALK
Extensions
Pre-Work

Name: _____   Date: _____

How could you represent addition as jumps on a number line? Subtraction?

What happens to the value of the numbers as we move right on a number line?

What happens to the value of the numbers as we move left on a number line?

Kierra put 8 flowers into a vase. She finds 9 more flowers in the garden and adds those flowers to the vase. How many flowers are in Kierra's vase now? How could you use a number line to represent this problem?