Number Stories

Create number stories with LEGO bricks

ENGAGE

Start the lesson by reading students the following story (feel free to copy the story onto chart paper or even provide a personal copy to students):

Max and Mia are working together on a timed design challenge. They have to build the tallest freestanding tower using only 20 LEGO bricks. They have only 5 minutes to complete their tower and at the end of the 5 minutes (no matter what!), their tower will be checked by the judges. Max and Mia were completing their tower when accidently one of their classmates bumped into their table at the last 5 seconds of the competition! Six of the LEGO bricks fell off their tower and there is no time to rebuild as the timer has officially gone off! How many bricks were left on their tower for judging?

Explain to students that this is an example of a number story, also known as a word problem. Students should identify that each number story/word problem contains two sets of numbers and that something happens to the items in those two sets—they are either added together or subtracted from each other.

EXPLORE

Using their LEGO bricks, have students recreate the story of Max and Mila. Have students build out a LEGO tower using only 20 bricks and then have 6 LEGO bricks "fall" off. Have the students write the number sentence to match the number story/word problem.

EXPLAIN

When the students have finished their models, ask questions like:
- How many LEGO bricks were available for the LEGO tower?
- How many LEGO bricks fell off the tower?
- How many LEGO bricks were remaining in the LEGO tower for judging?
- What number sentence could you write to accompany this number story/word problem?

ELABORATE

Tell students that they are going to write their own number stories. Have each student write an equation, such as 11 + 10, on their paper. (Make sure the numbers they use are small enough so that students have enough LEGO bricks to represent those numbers.) Brainstorm with students ideas for stories that can include their equations. If an equation is 11 + 10 = 21, for example, the story might be, "Maria had 11 red LEGO bricks. She borrowed 10 more LEGO bricks from her teacher. She now has 21 bricks."

EXTEND

Have students create a number story, but do not solve or include the number sentence! Provide the number sentence to a partner and have them solve the number story. They must include words, pictures, and a number sentence in their answer.

LEGO education