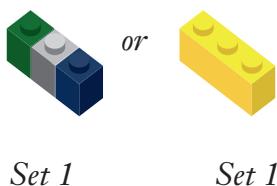




Addition Basics



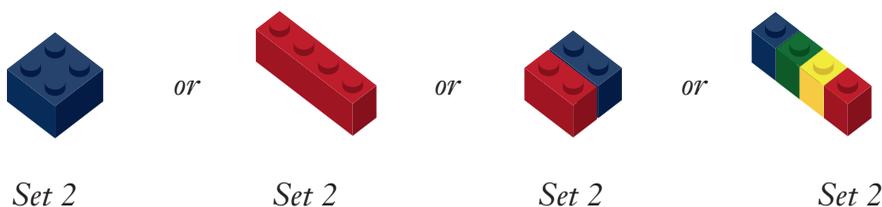
1. Build a model of the number 3 using either three 1x1 bricks or one 1x3 brick. Have students build their own models.

Ask students what number the model represents and how they know. Students should understand that counting each stud one-to-one shows 3 studs.

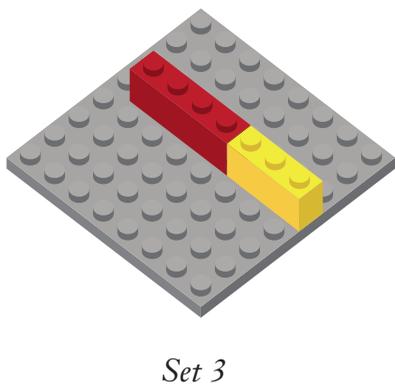
Have students draw the model and label it *Set 1*. Explain that a *set* is represented by a group of studs that model one number.

2. Build another model that shows the number 4. You can do this in four different ways: four 1x1 bricks, two 1x2 bricks, one 1x4 brick, or one 2x2 brick. Have students make their own models.

Have students draw their models and label them *Set 2*.



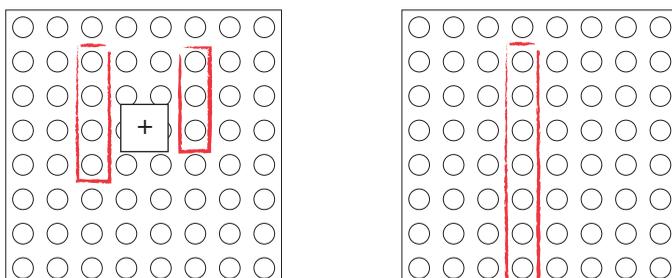
3. Ask students what would happen if one set of studs from Set 1 (representing the number 3) and one set of studs from Set 2 (representing the number 4) were combined. Students should answer that there would be 7 studs in the group. Have students build the solution model to prove the answer.



Have students draw their solution model and label it *Set 3*.



Explain that Set 3 represents the *sum* in the problem and that Sets 1 and 2 represent the *addends*. Show students a drawing of the brick model with the brick sets separated slightly, with a box between them that has an addition symbol in it.



Explain to students that the box between sets 1 and 2 is where we show the action of the math, using the addition symbol (+). Tell students that although this is sometimes called a “plus sign,” it’s better to name it using the action of the math—addition.

Note: Be careful not to call the *addition symbol* the “plus sign,” because it is not always referred to with that terminology. This can cause vocabulary issues on standardized tests.

Show students how to write a mathematical statement for their model: $3 + 4 = 7$

Have students write the mathematical statement.

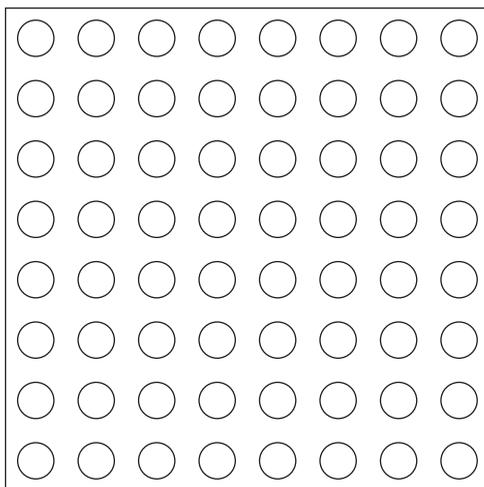
4. Review the terms *set*, *add*, *addend*, and *sum* using the models.



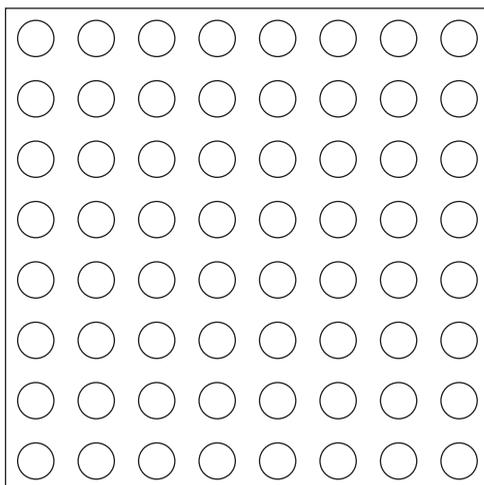
Brick Math Lesson of the Month: January 2021 from Addition Using LEGO® Bricks - Student Edition

Addition Basics

- 1.** Build a model of the number 3 using either three 1x1 bricks or one 1x3 brick. Draw your model and label it Set 1.



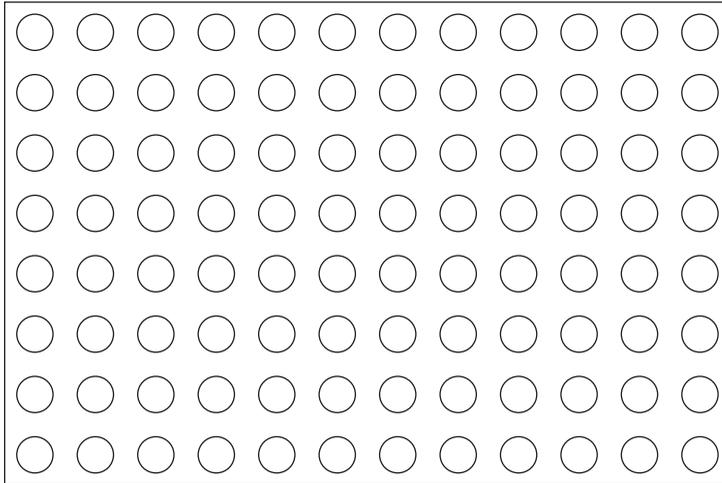
- 2.** Build a model of the number 4 using one of these methods: one 1x4 brick, one 2x2 brick, two 1x2 bricks, or four 1x1 bricks. Draw your model and label it Set 2.





3. What would your model look like if you combined set 1 and set 2?

Draw your solution. Label it Set 3.



Set 3 is called the _____ of sets 1 and 2.

Write the math symbol for this word. _____

Write a math sentence for the action of combining sets 1 and 2. _____

4. Fill in the blank with the correct word from the word bank.

Word bank: set, add, addend, sum

_____ : The individual numbers within the problem shown by the studs on the bricks.

_____ : The action of bringing together or combining the sets.

_____ : The two numbers in an addition problem.

_____ : The total of all studs joined together.