

# **Brick Math**

## **Lesson of the Month** from ***Subtraction Using*** ***LEGO<sup>®</sup> Bricks***

Teacher's Lesson Guide and  
Student Workbook Pages

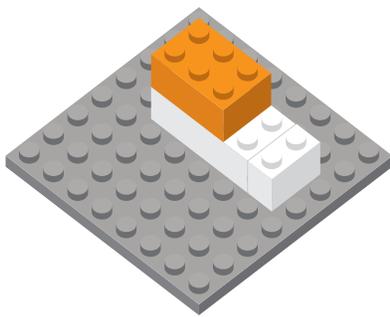
# Brick Math Lesson of the Month

## January 2020

### from Subtraction Using LEGO® Bricks

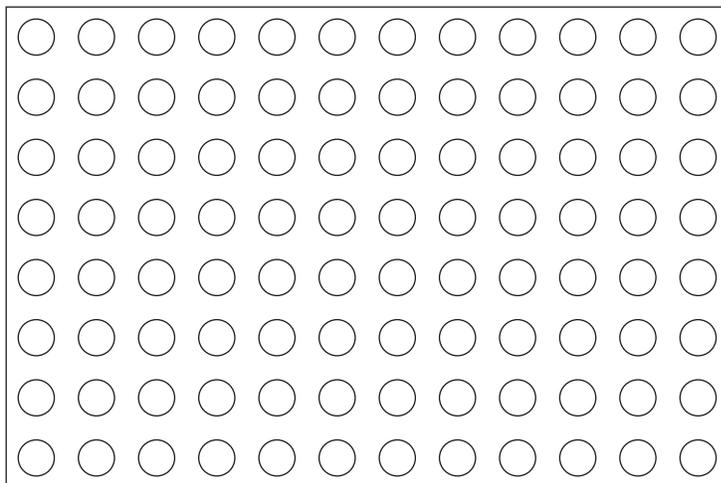
### Student Workbook Pages

## Ten-Frames Subtraction Within 20



1. Build a ten-frame using bricks of the same color. Build a model of the number 6 on top of the ten-frame with one or more bricks of another color. Count the studs. How many studs are on this model? \_\_\_\_\_

Draw your model.



2. Build a model of the number 4 on the baseplate with a brick of another color. Draw your model on the baseplate above.

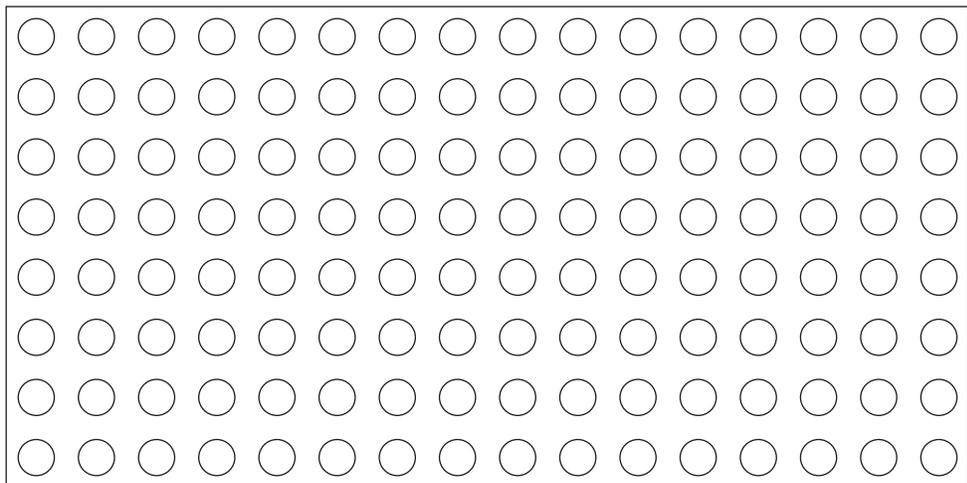


- 3.** Model the subtraction of 4 from 6 by placing the 4 studs on top of the 6 studs. Draw this model on the baseplate above.
- 4.** What is the solution to the problem? \_\_\_\_\_ *Hint:* The studs that are showing in the middle layer represent the *difference*.

Write a math sentence: \_\_\_\_\_

Circle the solution in your drawing above.

- 5.** Build a model of the number 12 using two ten-frames.
- 6.** Choose a brick to represent the number 8. Place this brick on the baseplate. Draw your models and write a math sentence.



\_\_\_\_\_

- 7.** Combine the models to show subtraction by placing the 8 studs on the 12 studs.

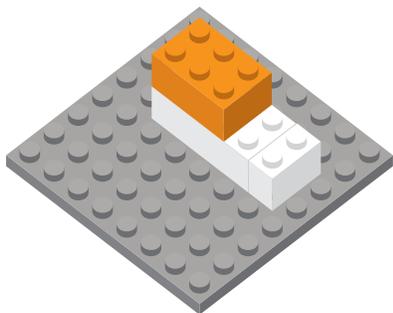
Draw this model. How many studs are left over? \_\_\_\_\_

This number is called the \_\_\_\_\_.



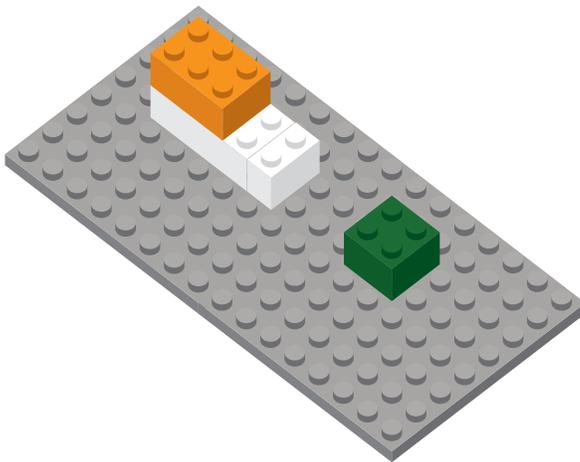
# Brick Math Lesson of the Month January 2020 from Subtraction Using LEGO® Bricks Teacher Edition

## Ten-Frames Subtraction Within 20



1. Ask students to count to 6 and show you six fingers. Build a ten-frame using bricks of one color. Build a model of the number 6 on the ten-frame using one 2x3 brick. Show students your model and have them build the same model. Have students count the number of studs in the model along with you. Have students draw the model.

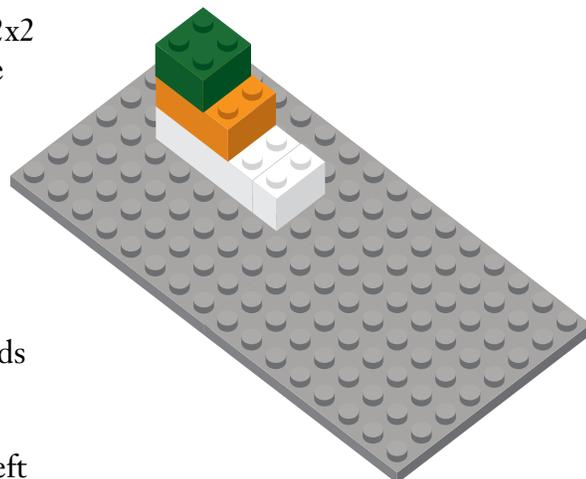
2. Build a model of the number 4 on the same baseplate with one 2x2 brick. *Note:* It is best to select a different color brick for this number.



Explain to students that the 2x2 brick represents the *subtrahend* of 4, which is the number being subtracted from 6. Have students build the same model and draw it.



3. Have students model the subtraction by placing the 2x2 brick on top of the 2x3 brick. Have students draw the models.

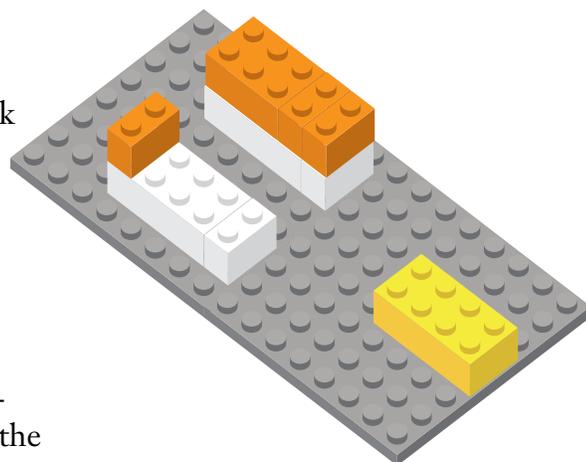


4. Make sure students understand that the bottom layer of 10 studs is the ten-frame, the middle layer of 6 studs represents the start number of 6 and the top layer of 4 studs represents the number being subtracted from the start number. Explain to students that the studs left showing in the middle layer represent the *difference* of 2 studs.

Show students how to write the math sentence for this problem:  $6 - 4 = 2$

5. Build a model of the number 12 using two ten-frames. Have students build the same model.

6. Choose a brick to represent the number 8 (a 2x4 brick works well). Place this brick on the baseplate. Have students build the model and draw it. Have students write a math sentence for this problem.



7. Combine the models to show subtraction by placing the 8 studs on the 12 studs. Count with students to demonstrate that the model shows 4 studs left uncovered, which is the *difference* of 4. Have students draw the models.

