

building groups



LEARNING GOAL

The goal of this activity is to show students that our number system is based on organized groups of ten and that numbers can be represented in many ways without the value of a number changing.

SUGGESTED USE

Whole Group



Small Group



Partners



Independent



This activity is best used to support students with building number sense when they are beginning to explore grade-level place value concepts.

MATERIALS & PREP

- Building Groups Page
- Student Work Page
- Base Ten Blocks

Print one Building Groups page for each student or group of students depending on how you have students working on this activity. Print one student work page for every student so that they can document their thinking.

DIRECTIONS

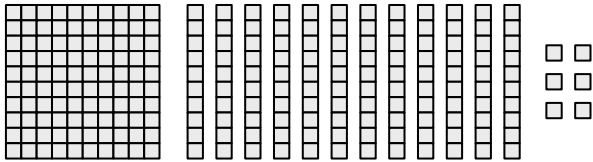
In the first part of this activity, students will use base-ten blocks to model the amount shown in the problem. Students will need to exchange groups of ten blocks to determine the total value of the base ten blocks modeled. Then, students will show their thinking by drawing a representation of their models on the student work page and writing

the value of each problem in standard form.

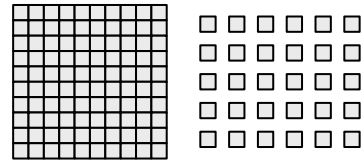
In the second part of this activity, students will be asked to work with base ten blocks flexibly and find different but equivalent ways to represent a given number. Students will show their thinking on the student work page by drawing a picture of how they modeled each number.

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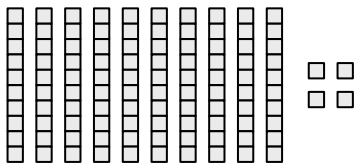
1 If the flat has a value of 1, what number is modeled?



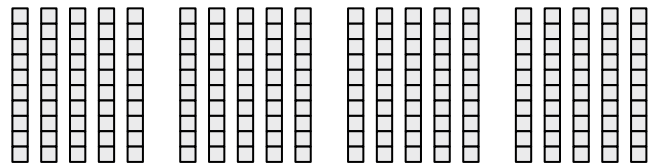
2 If the flat has a value of 1, what number is modeled?



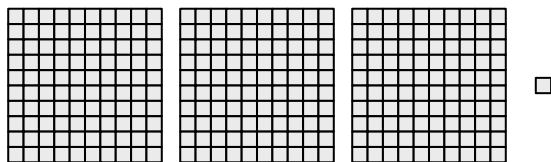
3 If the flat has a value of 1, what number is modeled?



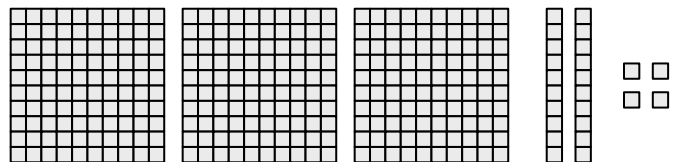
4 If the flat has a value of 1, what number is modeled?



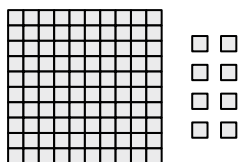
5 Show one way to model 3.01 that is different than the picture below.



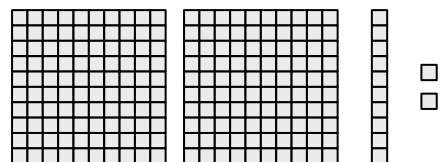
6 Show one way to model 3.24 that is different than the picture below.



7 Show one way to model 1.08 that is different than the picture below.



8 Show one way to model 2.12 that is different than the picture below.



NAME: _____

building groups

Use drawings and numbers to show your thinking.

1

2

3

4

How did you figure out the values of problems 1-4?

5

6

7

8

building groups

Use drawings and numbers to show your thinking.

1**2.26****2****1.3****3****1.04****4****2**

How did you figure out the values of problems 1-4?

Answers will vary.

5

Answers will vary. Possible solutions:
1 whole, 20 tenths, 1 hundredth
2 wholes, 9 tenths, 11 hundredths

6

Answers will vary. Possible solutions:
2 wholes, 12 tenths, 4 hundredths
3 wholes, 1 tenth, 14 hundredths

7

Answers will vary. Possible solutions:
10 tenths, 8 hundredths
8 tenths, 28 hundredths

8

Answers will vary. Possible solutions:
2 wholes, 12 hundredths
1 whole, 11 tenths, 2 hundredths

THANK YOU!

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