# Lesson 20: The Commutative Property

### Standards Alignments

|  |  |
| --- | --- |
| Building On | 2.NBT.B.5 |
| Addressing | 3.OA.B.5 |
| Building Towards | 3.NBT.A.2 |

### Teacher-facing Learning Goals

* Describe the commutative property of multiplication using arrays.

### Student-facing Learning Goals

* Let’s learn about the commutative property.

### Lesson Purpose

The purpose of this lesson is for students to describe the commutative property of multiplication using arrays.

In previous lessons, students used drawings of equal groups and arrays to represent multiplication situations. They also connected multiplication expressions and equations to these representations. In this lesson, students are introduced to the commutative property. Students will notice that the same product can be represented by different situations, arrays, or equations. Re-organizing the arrays or reversing the order of the factors in a multiplication expression does not change the total number of objects. It is important that students connect their equations to the corresponding situations and representations. They should be able to correctly explain what each factor and the product represents in their equations.

Note that students are not expected to use the name of the property. They should, however, be able to rely on their conceptual understanding of multiplication to explain why the product does not change when the order of the factors changes.

This lesson has a Student Section Summary.

### Access for:

### Students with Disabilities

* Representation (Activity 1)

### English Learners

* MLR8 (Activity 1)

### Instructional Routines

MLR1 Stronger and Clearer Each Time (Activity 2), Number Talk (Warm-up)

### Lesson Timeline

|  |  |
| --- | --- |
| Warm-up | 10 min |
| Activity 1 | 20 min |
| Activity 2 | 15 min |
| Lesson Synthesis | 10 min |
| Cool-down | 5 min |

### Teacher Reflection Question

What part of the lesson went really well today in terms of students learning? What did you do that made that part go well?

## Cool-down

(to be completed at the end of the lesson) 5min

Multiplication Reflection

### Standards Alignments

|  |  |
| --- | --- |
| Addressing | 3.OA.B.5 |

### Student-facing Task Statement

Summarize what you learned about multiplication today.

### Student Responses

Sample response: If we switch the order of the numbers we're multiplying, we get the same product. 