# Lesson 17: Connecting Cube Sculptures (Optional)

### Standards Alignments

|  |  |
| --- | --- |
| Addressing | K.CC |
| Building Towards | K.CC |

### Teacher-facing Learning Goals

* Answer “how many” questions.
* Count collections of objects.

### Student-facing Learning Goals

* Let’s build with connecting cubes and figure out how many we have.

### Lesson Purpose

The purpose of this lesson is for students to count and build with a collection of connecting cubes. The focus is understanding that the last number tells us how many objects there are (cardinality).

This lesson is optional because it does not address any new mathematical content standards. This lesson does provide students with an opportunity to apply precursor skills of mathematical modeling (MP4). In previous lessons, students counted collections of objects and represented how they counted. In this lesson students continue to build these skills. Students practice answering “how many” questions without recounting the group of objects. In the first activity, students count a collection of connecting cubes in a way that makes sense to them. In the second activity, they build using the connecting cubes and share what they made and how many connecting cubes they used with their group.

### Access for:

### Students with Disabilities

* Action and Expression (Activity 2)

### English Learners

* MLR8 (Activity 1)

### Instructional Routines

How Many Do You See? (Warm-up)

### Materials to Gather

* 5-frames: Activity 1, Activity 2
* Connecting cubes: Activity 1, Activity 2
* Counting mats: Activity 1, Activity 2

### Lesson Timeline

|  |  |
| --- | --- |
| Warm-up | 10 min |
| Activity 1 | 20 min |
| Activity 2 | 25 min |
| Lesson Synthesis | 5 min |