# Lesson 17: Add 0 and 1

### Standards Alignments

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| --- | --- |
| Addressing | K.CC.A.3, K.CC.B.4.c, K.OA.A.1, K.OA.A.2 |
| Building Towards | K.OA.A.5 |

### Teacher-facing Learning Goals

* Understand that adding 0 results in the same number.
* Understand that adding 1 results in the next number in the count sequence.

### Student-facing Learning Goals

* Let’s see what happens when we add 0 or 1.

### Lesson Purpose

The purpose of this lesson is for students to notice patterns when 0 and 1 are added to a number.

In previous lessons, students connected expressions to drawings and used drawings to help find the value of expressions. In previous sections and lessons, students developed their understanding of the meaning of zero as they solved story problems with a result of 0 and found the value of expressions where 0 is added or subtracted and where 0 is the result. In this lesson, students fill in expressions to represent 0 and 1 being added to a group of images and find the total. While students find the value of the expressions in the first activity, they may notice, through repeated reasoning, the pattern that the number stays the same when 0 are added and that the total is the next counting number when 1 is added (MP7, MP8). In the second activity, students notice and discuss these patterns.

This lesson has a Student Section Summary.

### Access for:

###  Students with Disabilities

* Representation (Activity 2)

###  English Learners

* MLR2 (Activity 2)

### Instructional Routines

Notice and Wonder (Warm-up)

### Materials to Gather

* Connecting cubes or counters: Activity 1, Activity 3
* Materials from previous centers: Activity 3

### Materials to Copy

* Add 0 and 1 Mat (groups of 2): Activity 1
* Find the Value of Expressions within 10 Stage 1 Cards (groups of 2): Activity 3
* Find the Value of Expressions within 10 Stage 1 Recording Sheet (groups of 1): Activity 3

### Lesson Timeline

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| --- | --- |
| Warm-up | 10 min |
| Activity 1 | 10 min |
| Activity 2 | 10 min |
| Activity 3 | 25 min |
| Lesson Synthesis | 5 min |

### Teacher Reflection Question

The standards ask students to count on from a given number (K.CC.A.2) and to understand that each successive number names refers to a quantity that is one larger (K.CC.B.4.c). How will the work in this lesson support students in counting on from a given number?

## Cool-down

(to be completed at the end of the lesson) 0min

Unit 4, Section C Checkpoint

### Standards Alignments

|  |  |
| --- | --- |
| Addressing | K.OA.A.1, K.OA.A.2 |

### Student-facing Task Statement

Lesson observations

### Student Responses

* Use fingers, objects, or drawings to find the value of an expression.
* Count all to determine the total when 0 or 1 are added.
* Use knowledge of the count sequence to determine the total when 1 is added.