# Lesson 4: Pattern Block Puzzles and Equations

### Standards Alignments

|  |  |
| --- | --- |
| Addressing | K.G.B.6, K.OA.A.1 |
| Building Towards | K.G.B.6 |

### Teacher-facing Learning Goals

* Match addition equations to shapes with two kinds of pattern blocks.

### Student-facing Learning Goals

* Let’s use equations to show how many of each shape there are.

### Lesson Purpose

The purpose of this lesson is for students to relate addition equations to shapes made with 2 kinds of pattern blocks.

In previous units, students have related expressions and equations to story problems, objects, and drawings. Students have separately made sense of equations with the total first ($3=2+1$) and with the addends first ($2+1=3$). In this lesson, students work with both forms of equations in the same activity, which requires them to attend to the placement and meaning of the plus sign. In this lesson, students hear equations read with the term “equals” rather than “is” for the first time. In future lessons, students will use equations to represent story problems about pattern blocks.

### Access for:

###  Students with Disabilities

* Engagement (Activity 2)

###  English Learners

* MLR8 (Activity 1)

### Instructional Routines

Which One Doesn’t Belong? (Warm-up)

### Materials to Gather

* Materials from previous centers: Activity 3
* Pattern blocks: Activity 1, Activity 2

### Lesson Timeline

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

### Teacher Reflection Question

In grade 1, students make sense of the meaning of the equal sign and determine if equations involving addition and subtraction are true or false. How does the work in this lesson prepare students for this work in grade 1?

## Cool-down

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

Unit 7, Section A Checkpoint

### Standards Alignments

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

### Student-facing Task Statement

Lesson observations

### Student Responses

* Explain connections between objects, drawings, story problems, and equations.