

# Lesson 21: Pattern Block Puzzles (Optional)

## Standards Alignments

Addressing 2.G.A.1, 2.MD.C.8, 2.NBT.B.5, 2.OA.A.1

### Teacher-facing Learning Goals

- Identify and compose new shapes from smaller shapes.
- Solve addition problems in the context of money.

### Student-facing Learning Goals

- Let's make pattern block puzzles.

## Lesson Purpose

The purpose of this lesson is for students to apply their understanding of composing shapes and addition in the context of money.

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.

In previous lessons, students found different ways to use pattern blocks to compose the same shape. They also used their understanding of coins and their values to solve addition problems.

In the warm-up, students are introduced to the context of a pattern block puzzle and use mathematical language to compare how the shapes are composed. In Activity 1, they create and solve pattern block puzzles. In Activity 2, they solve addition problems involving money within the pattern block puzzles context.

### Access for:

#### Students with Disabilities

- Action and Expression (Activity 1)

#### English Learners

- MLR7 (Activity 2)

## Instructional Routines

Notice and Wonder (Warm-up)

### Materials to Gather

- Card stock: Activity 1

- Pattern blocks: Activity 1

### Lesson Timeline

Warm-up	10 min
Activity 1	15 min
Activity 2	15 min
Lesson Synthesis	10 min

### Teacher Reflection Question

As you finish up this unit, reflect on the norms and activities that have supported each student in learning math. List ways you have seen each student grow as a young mathematician throughout this work. List ways you have seen yourself grow as a teacher. What will you continue to do and what will you improve upon in Unit 7?