

# **Lesson 11: Patterns and Ordered Pairs**

## **Standards Alignments**

Addressing 5.OA.B.3 Building Towards 5.G.A.1

### **Teacher-facing Learning Goals**

 Form ordered pairs consisting of corresponding terms from two patterns and graph the ordered pairs on a coordinate grid.

## **Student-facing Learning Goals**

Let's graph patterns on the coordinate grid.

#### **Lesson Purpose**

The purpose of this lesson is for students to represent corresponding terms in two patterns on the coordinate grid.

The purpose of this lesson is to continue to analyze the relationship between two patterns by plotting corresponding numbers on the coordinate grid. After generating patterns in previous lessons, students now make ordered pairs from those numbers and plot them on the coordinate grid. They observe patterns and interpret the meaning of points on the coordinate grid in terms of generating rules.

#### Access for:

#### **1** Students with Disabilities

Action and Expression (Activity 1)

## **3** English Learners

MLR8 (Activity 1)

#### Instructional Routines

Notice and Wonder (Warm-up)

#### **Lesson Timeline**

Warm-up	10 min
Activity 1	20 min
Activity 2	15 min
Lesson Synthesis	10 min

### **Teacher Reflection Question**

What strategy did most students use in their work today?



Cool-down 5 min

**Cool-down** (to be completed at the end of the lesson)

© 5 min

2 Rules

## **Standards Alignments**

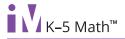
Addressing 5.OA.B.3

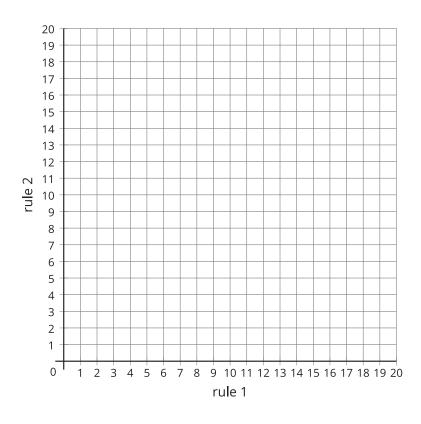
## **Student-facing Task Statement**

1. Complete the patterns for each rule.

	Α	В	С	D
Rule 1: Start at 0. Add 3.				
Rule 2: Start at 0. Add 6.				

- 2. What relationships do you notice between corresponding terms in the two patterns?
- 3. Plot and label the points on the coordinate grid.





# **Student Responses**

1.		Α	В	С	D
	Rule 1: Start at 0. Add 3.	0	3	6	9
	Rule 2: Start at 0. Add 6.	0	6	12	18

2. The numbers with rule 2 are twice as large as the corresponding numbers with rule 1. The numbers with rule 1 are  $\frac{1}{2}$  the corresponding numbers with rule 2.

3.

