6th MATH:WEEK 1

OVERVIEW

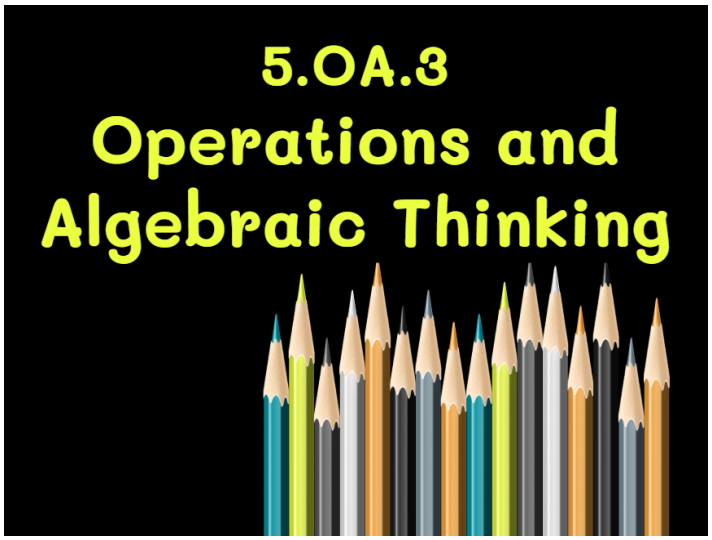
Watch video: This week we will review some 5th grade concepts to prepare us for 6th grade learning on proportional relationships. The focus this week will be on identifying and using patterns and rules, creating tables, and graphing on a coordinate plane.

5th grade SBAC Evidence Statements:

- ➔ The student generates numerical patterns using given rules.
- ➔ The student identifies relationships between corresponding terms.
- ➔ The student forms ordered pairs consisting of corresponding terms from two patterns.
- ➔ The student graphs the ordered pairs on a coordinate plane.

Review

Lesson 1	Lesson 2	Lesson 3	Lesson 4	Lesson 5
Numerical Patterns	Coordinate Plane	Coordinate Plane	Graph Numerical Patterns	Math Task: Patterns



LESSON 1

Numerical Patterns	**Daily Presentation**
Target A **Standard** 5.OA.3	**Generate two numerical patterns using two given rules. Identify apparent relationships between corresponding terms.** Form ordered pairs consisting of corresponding terms from the two patterns, and graph the ordered pairs on a coordinate plane. For example, given the rule "Add 3" and the starting number 0, and given the rule "Add 6" and the starting number 0, generate terms in the resulting sequences, and observe that the terms in one sequence are twice the corresponding terms in the other sequence. Explain informally why this is so. **In 5th grade, focus was on Quadrant I* **In 5th grade, patterns/rules are all addition*
Learning Intention **Success Criteria**	**Learning Intention:** We will understand numerical patterns. **Success Criteria: We will be successful when we can:** • recognize and generate numerical patterns/sequences by identifying the rule
Skills	• generate numerical patterns given rules • recognize numerical patterns/numerical sequences • identify relationships • explain informally your thinking through verbal/written form
Vocabulary	rules, patterns, numerical patterns, sequences, relationships
Sentence Frames	I found the pattern _____, so the rule is _____. The relationship between the two rules is _____.
Intro	**Opening** Intro Number Talks-use slides with rules/routines and *dot card* See video for example of Jo Boaler leading number talks with *dot card* ****Here you will find a presentation with information about Number Talks if you are not familiar with this routine. You will find purpose, procedures, and videos. Additional videos can be found on youtube.***
Lesson	**Model/Think-Aloud: Numerical Pattern** • review with 1 rule: ex. 3, 5, 7, 9, ... • review with 2 rules: ex. 3, 5, 7, 9 . . . and 6, 10, 14, 18 . . . • write and explain rule (use sentence frames) • given a rule and starting number (ex. 0), generate a pattern • identify relationships from pattern/rule
Closing	**Check for Understanding:** • Create 2 patterns/rules and submit in google classroom • Teacher randomly chooses several patterns that are submitted to share with whole group, students determine the rule
Resources	Math Behaviors (English and Spanish) Number Talks Slides Learn Zillion Videos Framework Grade 5 - Unit 3

LESSON 2

Coordinate Plane: Ordered Pairs	**Daily Presentation**
Target A **Standard** 5.OA3	Generate two numerical patterns using two given rules. Identify apparent relationships between corresponding terms. **Form ordered pairs** consisting of corresponding terms from the two patterns, and **graph the ordered pairs on a coordinate plane**. For example, given the rule "Add 3" and the starting number 0, and given the rule "Add 6" and the starting number 0, generate terms in the resulting sequences, and observe that the terms in one sequence are twice the corresponding terms in the other sequence. Explain informally why this is so.
Learning Intention **Success Criteria**	**Learning Intention:** We will learn about the coordinate plane. **Success Criteria: We will be successful when we can:** • identify parts of a coordinate plane • locate ordered pairs on a graph
Skills	• identifying ordered pairs • graph ordered pairs on coordinate plane • explain informally your thinking
Vocabulary	coordinate plane (origin, x-axis, y-axis, quadrant I, quadrant II, quadrant III, quadrant IV), ordered pairs, x-coordinate, y-coordinate
Sentence Frames	The x-coordinate is ___. The y-coordinate is ___. As the x-coordinate moves _____, the y-coordinate moves _____. The (first/second/third) point is located at _____. _____ coordinates are located in quadrant _____.
Intro	Number Talks-use slides with rules/routines and dot cards
Lesson	Intro to Coordinate Plane • Review vocabulary • Identify parts of coordinate plane • Identify the ordered pair on a graph
Closing	**Check for Understanding:** • Create an assignment for students to show their learning
Resources	Math Behaviors (English and Spanish) Number talks slides Learn Zillion Videos Framework Grade 5 - Unit 3

LESSON 3

Coordinate Plane: Graphing	**Daily Presentation**
Target A **Standard** 5.OA3	Generate two numerical patterns using two given rules. Identify apparent relationships between corresponding terms. **Form ordered pairs** consisting of corresponding terms from the two patterns, and **graph the ordered pairs on a coordinate plane**. For example, given the rule "Add 3" and the starting number 0, and given the rule "Add 6" and the starting number 0, generate terms in the resulting sequences, and observe that the terms in one sequence are twice the corresponding terms in the other sequence. Explain informally why this is so. **In 5th grade, focus was on Quadrant I* **In 5th grade, patterns/rules are all addition*
Learning Intention **Success Criteria**	**Learning Intention:** We will learn about the coordinate plane. **Success Criteria: We will be successful when we can:** • identify parts of a coordinate plane • locate ordered pairs on a graph • graph ordered pairs
Skills	• identifying ordered pairs • graph ordered pairs on coordinate plane • explain informally your thinking
Vocabulary	tables, coordinate plane (origin, x-axis, y-axis, quadrant I, quadrant II, quadrant III, quadrant IV), ordered pairs, x-coordinate, y-coordinate
Sentence Frames	As the first coordinate moves _____, the second coordinate moves _____. The coordinates __ and __ are located in the ___ quadrant. To graph the coordinates ___ and ___, start at the origin. Then, _____
Intro	Number Talks-use slides with rules/routines and dot cards
Lesson	Graphing on Coordinate Plane • Review parts of coordinate plane • Plot the ordered pair on graph • Independent practice
Closing	**Check for Understanding:** • Create an assignment for students to show their learning
Resources	Math Behaviors (English and Spanish) Number talks slides Learn Zillion Videos Framework Grade 5 - Unit 3 5.OA.3 Patterns templates 5.OA.3 Stone Designs Student

LESSON 4

Graphing Numerical Patterns	**Daily Presentation**
Target A **Standard** 5.OA3	Generate two numerical patterns using two given rules. Identify apparent relationships between corresponding terms. Form ordered pairs consisting of corresponding terms from the two patterns, and graph the ordered pairs on a coordinate plane. For example, given the rule "Add 3" and the starting number 0, and given the rule "Add 6" and the starting number 0, generate terms in the resulting sequences, and observe that the terms in one sequence are twice the corresponding terms in the other sequence. Explain informally why this is so. **In 5th grade, focus was on Quadrant I* **In 5th grade, patterns/rules are all addition*
Learning Intention **Success Criteria**	**Learning Intention:** We will generate numerical patterns and graph ordered pairs. **Success Criteria: We will be successful when we can:** • graph ordered pairs on the coordinate plane • identify the relationship between coordinates
Skills	• generate numerical patterns given rules • recognize numerical patterns from tables and numerical sequences • identify relationships • graph ordered pairs on coordinate plane • explain informally your thinking
Vocabulary	rules, patterns, numerical patterns, tables, sequences, coordinate plane, ordered pairs, first coordinate, second coordinate, relationships, x-coordinate, y-coordinate
Sentence Frames	I found the pattern _____, so the rule is _____. The relationship between the two coordinates is _____. As the first coordinate moves _____, the second coordinate moves _____.
Intro	Number Talks-use slides with rules/routines and dot cards
Lesson	Graphing Patterns • Review vocabulary • Example #1 (Model/Think Aloud) • Example #2 (Guided Practice) • Example #3 (Independent Practice)
Closing	**Check for Understanding:** • Create an assignment for students to show their learning • Additional examples/practice can be found in My Math, Chapter 7, Lesson 9.
Resources	Math Behaviors (English and Spanish) Number talks slides Learn Zillion Videos Framework 5.OA.3 Patterns templates 5.OA.3 Stone Designs Student

	Grade 5 - Unit 3

LESSON 5

Numerical Patterns: Graphing and Creating Ordered Pairs	**Daily Presentation**
Target A **Standard** 5.OA3	Generate two numerical patterns using two given rules. Identify apparent relationships between corresponding terms. Form ordered pairs consisting of corresponding terms from the two patterns, and graph the ordered pairs on a coordinate plane. For example, given the rule "Add 3" and the starting number 0, and given the rule "Add 6" and the starting number 0, generate terms in the resulting sequences, and observe that the terms in one sequence are twice the corresponding terms in the other sequence. Explain informally why this is so. **In 5th grade, focus was on Quadrant I* **In 5th grade, patterns/rules are all addition*
Learning Intention **Success Criteria**	**Learning Intention: We will practice using numerical patterns.** **Success Criteria: We will be successful when we can:** • Generate numerical patterns from the given rules on a table. • graph ordered pairs. • generate ordered pairs.
Skills	• generate numerical patterns given rules • recognize numerical patterns from tables and numerical sequences • identify relationships • graph ordered pairs on coordinate plane • explain informally your thinking
Vocabulary	rules, patterns, numerical patterns, tables, sequences, coordinate plane, ordered pairs, first coordinate, second coordinate, relationships, x-coordinate, y-coordinate
Sentence Frames	I found the pattern _____, for the rule is _____. The relationship between the two rules is _____. As the first coordinate moves _____, the second coordinate moves _____.
Intro	Number Talks-use slides with rules/routines and dot cards
Lesson	**Math Task** • Create a table with numerical patterns by following the given rules. • Graph the given numerical pattern from a table. • From a graph generate ordered pairs.
Closing	**Check for Understanding:** • Create an assignment for students to show their learning • Additional math tasks can be found in Grade 5 - Unit 3.

Resources	Math Behaviors (English and Spanish) Number talks slides Learn Zillion Videos Framework Grade 5 - Unit 3 McGraw Hill Virtual Manipulatives Function Machine 5.OA.3 Patterns templates 5.OA.3 Stone Designs Student