Student Teaching Evaluation of Performance (STEP) Template

STEP Standard 3 - Assessment and Data Literacy

Pre- and post-assessments are used to assess the learning that takes place from participating in a learning activity. The pre-assessment is given to students before instruction, in order to determine their prior knowledge of the topic, or inaccurate knowledge, which is sometimes the case. After students have participated in the unit, they are given the post-assessment, which can be the same as the pre-assessment, a modified version, or something comparable that measures the same concepts.

Formative assessment is acceptable, work with your mentor teacher to determine the best way to collect data in your classroom.

Pre-Assessment - Copy and paste the pre-assessment you plan to use to assess the students' knowledge of the topic prior to implementing the unit lessons. Include the scoring criteria used to determine whether the student is Highly Proficient, Proficient, Partially Proficient, Minimally Proficient when it comes to meeting the learning goal and measurable objectives.

Unit 6 Module 1 | Session 1 *class set, plus 1 copy for display*

NAME | DATE

Unit 6 Pre-Assessment page 1 of 4

1 Here are some statements about rhombuses. Write T or F beside each statement to show whether it is true or false. Then use the properties of shapes to explain each answer.

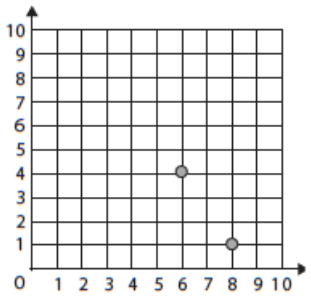
Statement	T or F	Explanation
ex A rhombus is a trapezoid.	F	A trapezoid has exactly 1 pair of parallel sides. A rhombus has 2 pairs of parallel sides, so it can't be a trapezoid.
a A rhombus is a parallelogram.		
b A rhombus is a rectangle.		
c A rhombus is a quadrilateral.		
d A square is a special kind of rhombus.		

2 Why do people say that a square is a special kind of rectangle? Use properties of shapes in your answer.

NAME _____ DATE _____

Unit 6 Pre-Assessment page 2 of 4

3 Use this coordinate grid to complete the following problems.



a Write an ordered pair for each point shown on the grid.

(_____, _____) (_____, _____)

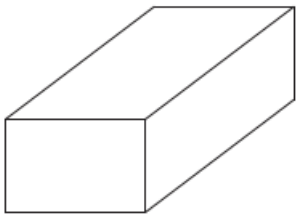
b Add these ordered pairs to the grid, and label each one: (8, 8) (10, 4).

c Connect the points on the grid to form a quadrilateral. Circle all the names that could be used to describe the figure you made.

polygon kite parallelogram rhombus

4 Measure and label each dimension—length, width, and height—of this rectangular prism in centimeters.

a Use the information to find the volume of the prism. Label your answer with the correct units.



Volume _____

b Circle the formulas you could use to find the volume of the prism above.

$V = l \times w$ $V = l \times w \times h$ $V = l + w + h$ $V = b \times h$

(continued on next page)

NAME _____ DATE _____

Unit 6 Pre-Assessment page 3 of 4

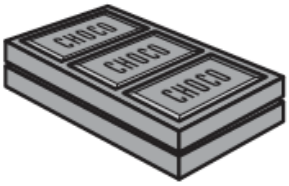
5 The area of the base of a rectangular prism is 45 cm^2. The height of the prism is 6 cm. What is the volume of the prism? Use numbers, labeled sketches, or words to model and solve this problem. Label your answer with the correct units.

The volume of the prism is _____

6 If Matthew knows the volume of a rectangular prism is 132 m^3 and the area of the base is 22 m^2, what is the height? Use numbers, labeled sketches, or words to model and solve this problem. Label your answer with the correct units.

The height of the rectangular prism is _____

7 Katy measured a mini-candy bar in the shape of a rectangular prism. It was 5 mm tall, 40 mm long, and 20 mm wide. Then she stacked 2 of the mini-candy bars on top of each other. What is the volume of the 2 stacked candy bars? Use numbers, labeled sketches, or words to model and solve this problem. Label your answer with the correct units.



The volume of the 2 stacked candy bars is _____

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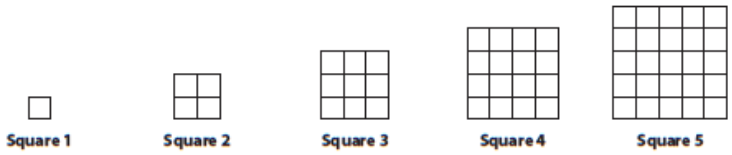
NAME | DATE

Unit 6 Pre-Assessment page 4 of 4

8 Darius used tiles to build the sequence of growing squares shown here.



Record the perimeter and the area of each square in the table below. The first one is done for you.

	Square 1	Square 2	Square 3	Square 4	Square 5
Perimeter	4				
Area	1				

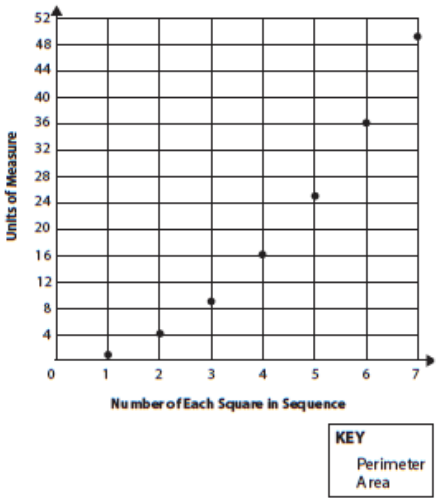
9 Darius decided to make a graph about his sequence of squares, but he was only able to partly finish.

a Did Darius graph the area or the perimeter of the squares?

b Label each of the ordered pairs that Darius graphed.

c Graph and label the ordered pairs for the other measurement and fill in the key.

d Describe the shape of each set of points on the graph—the points for the perimeters of the squares, and the points for the areas of the squares. Why are they different?



Unit 6 Pre-Assessment Scoring Guide page 1 of 2

Item & Correct Answer	CCSS	Points Possible	Student Name														
1a–d Identifies whether statements about a rhombus are true or false. Uses properties of shapes to justify each response. *T, F, T, T; explanations will vary. Examples: a) A rhombus has 2 pairs of parallel sides so it is a parallelogram; b) A rhombus does not have to have 4 right angles, so it is not a rectangle; c) A rhombus is a quadrilateral because it has 4 sides; d) A square is a rhombus with 4 right angles.*	5.G.3 5.G.4	**8 pts.** (2 pts. per item): • 1 pt. for identifying the statement correctly as true or false • 1 pt. for a reasonable explanation that makes reference to properties of shapes															
2 Explains why a square is called a special kind of rectangle. *Students' responses will vary. Example: A square is a rectangle with all 4 sides the same length.*	5.G.3 5.G.4	**1 pt:** Response must make reference to properties of shapes.															
3a Writes an ordered pair for each of two points shown on a coordinate grid. *(6, 4), (8, 1)*	5.G.1	**2 pts.** • 1 pt. for each correct response															
3b Graphs and labels ordered pairs on a coordinate grid. *See answer key.*	5.G.1	**2 pts.** • 1 pt. for each ordered pair correctly graphed and labeled															
3c Selects all the names that could be used to describe the quadrilateral formed on the graph by connecting the 4 points. *Choices 1 and 2: polygon and kite.*	5.G.4	**1 pt.** *Response must be entirely correct to score a point. with Choices 1 & 2 circled and Choices 3 & 4 not circled.*															
4a Measures and labels the dimensions of a rectangular prism. Uses the information to find the volume of the prism. *4 cm by 3 cm by 2 cm, 24 cubic cm*	5.MD.5b	**5 pts.** • 3 pts. for correct dimensions • 1 pt. for correct volume • 1 pt. for labeling answer with correct units															
4b Selects the formulas that could be used to find the volume of the prism. *Choices 2 & 4: $V = l \times w \times h$ and $V = b \times h$.*	5.MD.5b	**1 pt.** *Response must be entirely correct to score a point. with Choices 2 & 4 circled and Choices 1 & 3 not circled.*															
5 Finds the volume of a rectangular prism given the area of the base and the height of the prism. Shows work. Labels answer with correct units. *270 cubic centimeters. Work will vary.*	5.MD.5b	**3 pts.** • 1 pt. for correct answer • 1 pt. for work that could lead to the correct answer • 1 pt. for labeling answer with correct units															
		Subtotal page 1															

Unit 6 Pre-Assessment Scoring Guide page 2 of 2

Student Name

Item & Correct Answer	CCSS	Points Possible
6 Finds the height of a rectangular prism given its volume and the area of its base. Shows work. Labels answer with correct units. *6 meters. Work will vary.*	5.NBT.6 5.MD.5b	**3 pts.** *See scoring guidelines for problem 5 above.*
7 Solves a story problem that involves finding the volume of 2 rectangular prisms stacked on top of each other, given the length, width, and height of one of the prisms. Shows work. Labels answer with correct units. *8,000 cubic millimeters. Work will vary.*	5.MD.5b 5.MD.5c	**3 pts.** *See scoring guidelines for problem 5 above.*
8 Generates two numerical patterns using two given rules. *Perimeters: 8, 12, 16, 20 Areas: 4, 9, 16, 25*	5.OA.3	**2 pts.** • 1 pt. for each entirely correct sequence
9a Identifies the meaning of the values of coordinate points based on the context of the situation. *He graphed the area of each square.*	5.G.2	**1 pt.**
9b Writes the *x*- and *y*-coordinates of a set of points on a coordinate grid as ordered pairs. *(1,1) (2,4) (3,9) (4,16) (5,25) (6,36) (7,49)*	5.G.1	**2 pts.** possible: • 2 pts. for labeling all 7 points correctly • 1 pt. for labeling at least 4 points correctly
9c Graphs points in the first quadrant of a coordinate plane to represent a problem. *See answer key.*	5.G.1 5.G.2	**4 pts.** possible: • 4 pts. for graphing and labeling all 7 points correctly • 2 pts. for graphing and labeling at least 4 points correctly • 0 pts. for less than 4 points graphed and labeled correctly
9d Describes the shape of each set of points on the graph, and explains why they're different. *Students' responses will vary. Example: The points for the perimeters go up in a straight line. The points go up in a curve for the area because the area grows faster than the perimeter.*	5.OA.3	**2 pts.** • 1 pt. for describing the shape of each set of points on the graph • 1 pt. for a reasonable explanation as to why the two sets form different shapes
		Subtotal page 2
		Subtotal from page 1
TOTAL SCORE/LEVEL OF PROFICIENCY*		**40 pts.**

10–40 points (25%–100%): Working at Tier 1 or Tier 2 Level **9 points or fewer (24% or less):** May need Tier 3 support to succeed with the work in Unit 6

Bridges Unit Assessments | Unit 6 *copies as needed*

Pre-Assessment Data: Whole Class - Once you have assessed your students' knowledge on the topic, collect and analyze the pre-assessment data to determine if you will need to modify the standards, learning goal, or measurable objectives that will be addressed during instruction.

	Number of Students
Highly Proficient (90%-100%)	1
Proficient (80%-89%)	2
Partially Proficient (70%-79%)	2
Minimally Proficient (69% and below)	19

Pre-Assessment Analysis: Whole Class

47% Class Average showed weakness in showing the value of x and y

Post-Assessment – Copy and paste the post-assessment you plan to use to assess the students' knowledge of the topic after implementing the unit lessons. The post-assessment can be the same as the pre-assessment, a modified version, or something comparable that measures the same concepts. Include the scoring criteria used to determine whether students are Highly Proficient, Proficient, Partially Proficient, Minimally Proficient when it comes to meeting the learning goal and measurable objectives.
Post Assessment was a Graphing Patterns Check Point (a summative assessment checking on skills: 5.G.1 / 5.G.2. This check point revisited standards 5.G1 / 5.G.2 the ability to plot coordinate pairs and label coordinates, find numerical patterns, values of coordinates and any relationship between patterns. Class average went up 31%; there are 3 more summative assessments (check points) before the unit 6 Post Assessment, that will each build upon new skills within the unit. Next check points will review 5.NBT; 5N.MD.5B/C; 5.OA.3, after instructions are given in the rest of Unit 6.

NAME | DATE

Graphing Patterns Checkpoint page 1 of 2

1 The T-Shirt Shack is having a big sale. You can get plain T-shirts for $3.00 each and fancy T-shirts with pictures on them for $6.00 each. Fill in the table below to show how much you would have to pay for different numbers of T-shirts.

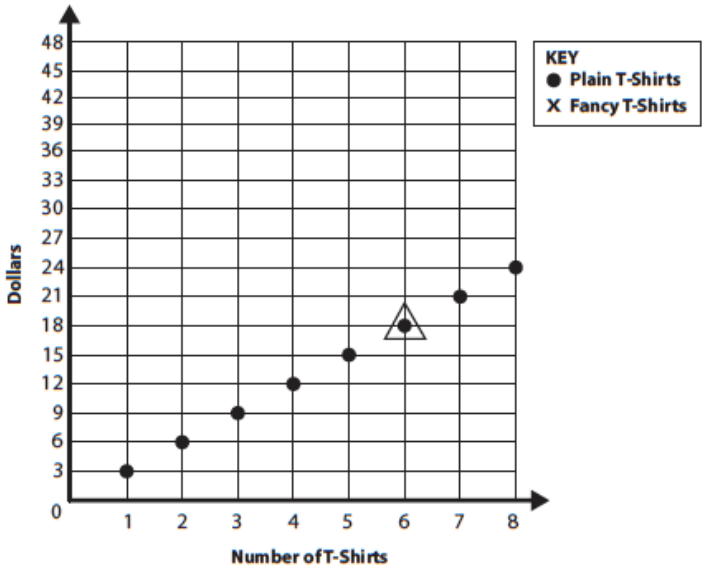
Number of Shirts	1	2	3	4	5	6	7
Plain T-shirts	$3.00						
Fancy T-shirts	$6.00						

2 Henry's grandma decided to go to the sale and buy T-shirts for all her grandchildren. She got 8 plain T-shirts, and 8 fancy T-shirts. Henry decided to make a graph about the T-shirts his grandma bought, but he only got partway finished.

a Did he graph the cost of the plain or the fancy T-shirts?

b Label each of the ordered pairs that Henry graphed.

c Graph and label the ordered pairs for the other kind of T-shirts.



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NAME | DATE

Graphing Patterns Checkpoint page 2 of 2

3 Find the coordinate point on the graph with a triangle around it. What information does this point give someone reading the graph? Fill in the bubbles beside all the statements that fit.

- ○ Grandma paid $18 for 6 fancy T-shirts.
- ○ Grandma paid $18 for 6 plain T-shirts.
- ○ Six plain T-shirts cost half as much as 6 fancy T-shirts.
- ○ Six plain T-shirts cost one-third as much as 6 fancy T-shirts.

4 Henry's cousin, Katy, was looking at his graph and said, "The coordinate points for the fancy T-shirts make a steeper line than the coordinate points for the plain T-shirts." Explain to Katy why it works this way.

Graphing Patterns Checkpoint Scoring Guide

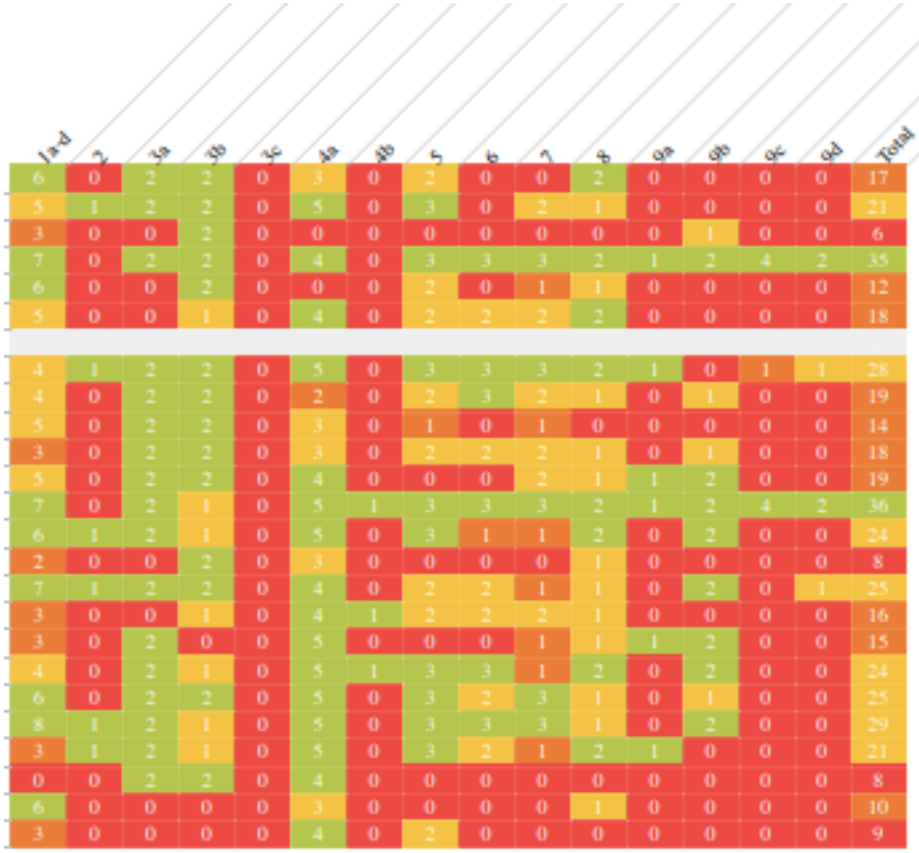
Item & Correct Answer	CCSS	Points Possible	Student Name														
1 Generates two numerical patterns using two given rules. *Plain T-shirts: $6.00, $9.00, $12.00, $15.00, $18.00, $21.00* *Fancy T-shirts: $12.00, $18.00, $24.00, $30.00, $36.00, $42.00*	5.OA.3	**2 pts.** • 1 pt. for each entirely correct sequence															
2a Identifies the meaning of the values of coordinate points based on the context of the situation. *He graphed the cost of the plain T-shirts.*	5.G.2	**1 pt.**															
2b Writes the *x*- and *y*-coordinates of a set of points on a coordinate grid as ordered pairs. *(1,3) (2,6) (3,9) (4,12) (5,15) (6,18) (7,21) (8,24)*	5.G.1	**2 pts.** possible: • 2 pts. for labeling all 7 points correctly • 1 pt. for labeling at least 4 of the points correctly															
2c Graphs points in the first quadrant of a coordinate plane to represent a problem. *See answer key.*	5.G.1 5.G.2	**4 pts.** possible: • 4 pts. for graphing and labeling all 7 points correctly • 2 pts. for graphing and labeling at least 4 of the points correctly • 0 pts. for less than 4 points graphed and labeled correctly															
3 Identifies the meaning of a particular point on the graph (Choice 2), and identifies the relationship between corresponding terms in two numerical patterns generated according to 2 different rules (Choice 3). *Choice 2: Grandma paid $18 for 6 plain T-shirts.* *Choice 3: 6 plain T-shirts cost half as much as 6 fancy T-shirts.*	5.OA.3 5.G.2	**2 pts.** 1 pt. per correct choice															
4 Explains the relationship between corresponding terms in two numerical patterns generated according to two different rules. *Students' responses will vary. Example: The points for the fancy T-shirts make a steeper line because the fancy T-shirts cost twice as much as the plain T-shirts.*	5.OA.3	**1 pt.** for a reasonable explanation															
TOTAL SCORE/LEVEL OF PROFICIENCY*		**12 pts.**															

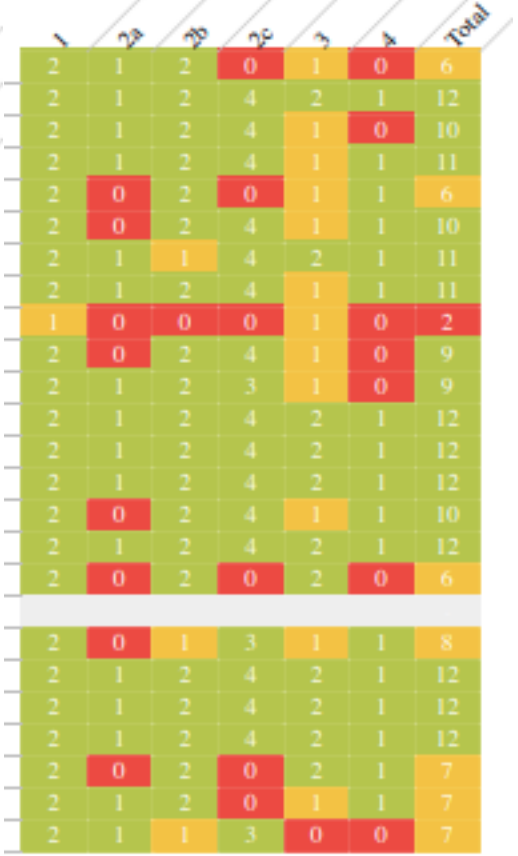
*** Meeting Standard** 9–12 points (75%–100% correct) **Approaching Standard** 6–8 points (50–74% correct) **Strategic** 3–5 points (25–49% correct) **Intensive** 2 points or less (24% or less correct)

Unit 6 Pre-Test Assessment

Unit 6 Graphing Patterns Check Point

1st Unit 6 checkpoint out of 3





STEP Standard 4 - Unit and Lesson Planning

Grade Level: 5

Unit/Subject: Unit 6/Math

	Day 1	Day 2	Day 3	Day 4	Day 5
National/State Learning Standards *List specific grade-level standards that are the focus of the lesson being presented.*	CCSS.5.OA.B.3 CCSS.5.G.A.1 CCSS.5.G.A.2	CCSS.5.OA.B.3 CCSS.5.G.A.1 CCSS.5.G.A.2	CCSS.5.OA.B.3 CCSS.5.G.A.1 CCSS.5.G.A.2 CCSS.5.NBT.B.7	CCSS.5.OA.B.3 CCSS.5.G.4 CCSS.5.G.3 CCSS.5.MP.4 CCSS.5.MP.5	CCSS.5.OA.B.3 CCSS.5.G.4 CCSS.5.G.3 CCSS.5.MP.4 CCSS.5.MP.5 CCSS.5.MP.7
Specific Learning Target(s)/Objectives *Based on state standards, identify what is intended to be measured in learning.*	Students will be able to: plot coordinate pairs -Use patterns in graphs to make predictions -Identify X and Y values	Students will be able to: find numeric patterns to graph as ordered pairs -Use patterns in graphs to make predictions -Identify X and Y values	Students will be able to: plot coordinate pairs -Use patterns in graphs to make predictions -Identify X and Y values	Students will be able to: -Classify 2D shapes based on attributes and/or hierarchy -model with mathematic tools -Understand that characteristics of a 2D figures also fall under subcategories	Students will be able to: - Classify 2D shapes based on attributes and/or hierarchy -model with mathematic tools -Understand that characteristics of a 2D figures also fall under subcategories
Academic Language *General academic vocabulary and content-specific vocabulary included in the unit.*	y-axis, x-axis, arrangement, coordinate plane, sequence, ordered pair	Non-linear pattern, linear pattern, y-axis, x-axis, arrangement, coordinate plane, sequence, ordered pair	Coordinates, coordinate points, multiply, coordinate plane, ordered pairs, arrangement, y-axis, x-axis	Acute angle, angle, congruent, hierarchy, obtuse angle, parallel, parallelogram, quadrilateral, rectangle, right angle, rhombus, right angle, trapezoid	Acute angle, angle, congruent, hierarchy, obtuse angle, parallel, parallelogram, quadrilateral, rectangle, right angle, rhombus, right angle, trapezoid
Unit Resources, Materials, Equipment, and Technology	Foam squares, projector, Elmo, whiteboard, SB p. 212-213	Calculators, rulers SB p. 217-219	Colored pencils, dice, game markers Workplace- Dragon's Treasure	Anchor chart, geoboards, rubber-bands, protractor, markers, projector, whiteboard, rulers SB p. 223	Anchor chart, geoboards, rubber-bands, protractor, markers, projector, whiteboard, rulers, wooden triangle block,

List all resources, materials, equipment, and technology to be used in the unit.					markers, pocket chart, anchor chart SB p. 222-226
Depth of Knowledge Lesson Questions *What questions can be posed throughout the lesson to assess all levels of student understanding?* • *Level 1: Recall* • *Level 2: Skill/Concepts* • *Level 3: Strategic Thinking* • *Level 4: Extended Thinking*	-How do the sequences compare? -How do the arrangement # and # of cubes relate in each sequence? -What did you notice as you graphed the two sequences? -Can you predict the 8th tower?	-Which payment plan do you predict will reach $1,000 goal first? -After seeing the first 5 days, do your predictions change? Why/Why not -Which turned out to be the best plan? -How many days will it take for each plan to reach $1,000? -Which plan displays a linear pattern? Why If plan 2, how much would he have made by the 20th day? 100th day?	-Can you travel diagonally while plotting coordinates? -While playing against class, students offer up different pathways to earn the most points, giving the correct coordinates and point values	-Anyone know what hierarchy means? -Can you identify an acute, obtuse, or right angle on your geoboard? How can you classify, or what characteristics classify the triangles? -Can you identify the triangle I made on my geoboard? Turn and talk--- to check, does a square pattern fit inside?	Brainstorm as many different types of quadrilaterals as they can -Can you move from the bottom to the top or the top to the bottom when looking at a hierarchy of quadrilaterals?
Anticipatory Set *How will students' prior knowledge be activated as well as gain student interest in the upcoming content?*	Build and discuss arrangements made in previous session from student book	*display Tile Pools from yesterday's lesson, students observe and discuss plotting the two patterns *intro linear/non-linear	Who can remind me how to plot x & y values on a coordinate plane -	Can you make 4 different triangles using your rubber-bands and geoboards using prior knowledge of shapes? (no)	Looking at the anchor chart from yesterday, can you identify a category or subcategory?
Presentation of Content					
Multiple Means of Representation *Describe how content will be presented in various ways to meet the*	Student book Projector Anchor charts Handouts Math notebook	Student book Projector Anchor charts Handouts Math notebook	Student book Projector Anchor charts Handouts Math notebook	Student book Projector Anchor charts Handouts Math notebook	Student book Projector Anchor charts Handouts Math notebook

needs of different learners.					
Multiple Means of Representation Differentiation *Explain how materials will be differentiated for each of the following groups:* • *English Language Learners (ELL)* • *Students with special needs* • *Students with gifted abilities* *Early finishers (those who finish early and may need additional sources/support)*	Small group Teacher led group -reteach extra time read aloud manipulatives early finishers can answer challenge questions in student book	Small group Teacher led group -reteach extra time read aloud manipulatives early finishers can answer challenge questions in student book	Small group Teacher led group -reteach extra time read aloud manipulatives early finishers can answer challenge questions in student book	Small group Teacher led group -reteach extra time read aloud manipulatives geoboard early finishers can answer challenge questions in student book	Small group Teacher led group -reteach extra time read aloud manipulatives geoboard early finishers can answer challenge questions in student book
Application of Content					
Multiple Means of Engagement *How will students explore, practice, and apply the content?*	Build 1st 3 pool arrangements with manipulative Make a prediction and build 4th and 5th arrangement	Read, turn and talk with table partner on which plan is better and why Fill out first 5 days, does your prediction change?	Trace your path on the board with a marker	Classify by size; any other categories? How can you test or be sure of angles?	With the use of hierarchy, how does it work? Are there any predications for other categories and/or subcategories?
Multiple Means of Engagement Differentiation *Explain how materials will be differentiated for each of the following groups:*	Students may use manipulatives to visualize arrangement Student book offers extension for early finishers-Tiles pool	Students can use counters to represent values of problem	Students can us markers of choice -Students can do powers of 10 in Workplace	Give students shape blocks for visual and tactile learners during lesson	Give students shape blocks for visual and tactile learners during lesson

• *English Language Learners (ELL)* • *Students with special needs* • *Students with gifted abilities* *Early finishers (those who finish early and may need additional sources/support)*	challenge page. 214 and 215				
Assessment of Content					
Multiple Means of Expression *Formative and summative assessments used to monitor student progress and modify instruction.*	Students build 4th and 5th arrangement -add to class t-chart during lesson -complete arrangement sequences	Complete table and graph; answer follow up questions on page 217 -which is linear and non-linear -which format best communicates Anthony's results?	Graphing Patterns Check-Point	Classify by length Classify by side How is the chart being organized? Label shapes in student book p. 223	Classify by length Classify by side How is the chart being organized? Student book p. 225-226
Multiple Means of Expression Differentiation *Explain how materials will be differentiated for each of the following groups:* • *English Language Learners (ELL)* • *Students with special needs* • *Students with gifted abilities* *Early finishers (those who finish early and may*	Cubes can be used	Calculator can be used	Calculators to check answers during workplace	Visual shapes Wooden shapes Foam shapes geoboard	Visual shapes Wooden shapes Foam shapes Geoboard Anchor chart

need additional resources/support)					
Extension Activity and/or Homework					
Identify and describe any extension activities or homework tasks as appropriate. Explain how the extension activity or homework assignment supports the learning targets/objectives. As required by your instructor, attach any copies of homework at the end of this template.	Student Book p. 216 'More Coordinate Dot-to-Dots will give students practice in locating a point based on its coordinates or ordered pair, and writing the x and y values as an ordered pair in the correct order	Student Book p. 115-118 'Lemonade Stand' will give students practice in multiplying and dividing decimals to hundredth, solving story problems that involve whole numbers by a fraction, and locating a point based on its coordinates or ordered pair, while writing the x and y values as an ordered pair in the correct order	Student Book p. 220 'Miranda's Number Patterns' will give students practice in identifying relationships between numerical patterns and ordered pairs, graphing ordered pairs within two numerical patterns and locating a point based on its coordinates or ordered pair, while writing the x and y values as an ordered pair in the correct order	Student Book p. 119-120 'Types of Triangles' will give students practice in understanding and classifying 2D shapes based on their properties and how they relate to a subcategory	Student Book p. 224 'Geoboard Triangles' will give students practice in understanding and classifying 2D shapes based on their properties and how they relate to a subcategory

STEP Standard 5 - Implementation of Instructional Unit

Video Recording Link: https://youtu.be/u8XN7PSW1lk

(Video is uploaded as unlisted, use link to access)

Summary of Unit Implementation: Within the sessions above, students will use algebraic thinking and analyzing patterns to predict and graph the cube/tile arrangements, and compare and contrast the relationship between the two sets of ordered pairs. Afterwards, the students will begin to identify, classify and categorize 2D shapes with the use of hierarchies.

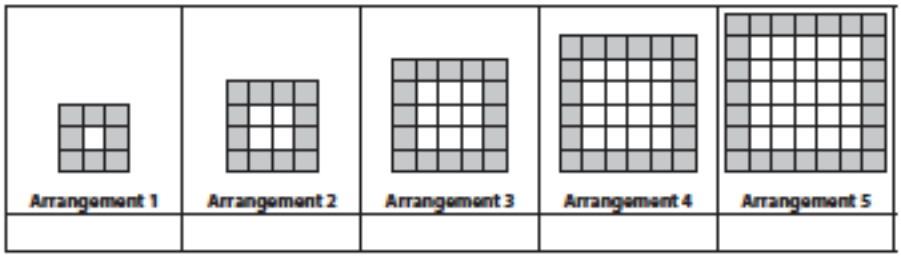
Summary of Student Learning: Students will be introduced to coordinate graphing and using hierarchies to classify 2D shapes by their characteristics. Students are given a variety of math manipulatives to work with to support a variety of learners. homework and in class work in student book is review based on need of learners in order to progress with that certain concept or skill.

Reflection of Video Recording: It is strange to think this is my 3rd year in education and I have never watched a recording of myself teaching a lesson. On recording day, I found myself eager to not only test my knowledge, leadership and comfortability navigating throughout the classroom, but show the students I had been working with how much I've grown watching them grow. As I watch the recording, there are things I notice throughout the lesson. The class I'm teaching is about halfway through the unit, so the first activity acts as a refresher or review on multiplying whole numbers by a fraction to keep that concept free of the cobwebs. Although the students were engaged, participating and being active listeners, I couldn't help but notice my tone of voice and body language. Compared to the instructional lesson for the day, I come across almost impatient and very matter-of-fact. This goes without saying, but normally we don't listen to recordings of ourselves speaking for a set period of time, and I am my worst critic; however, I noticed a definite change between the review and instructional lesson. I want to strive to be more aware of my posture and tone of voice, giving expression and inflection to keep material light and exciting for the students. I am however, pleased with my use of visuals, pacing around the room and the variety of questions I gave to engage the students in thinking and performing in favor of the content. I observed many moments of guided practice and independent/partner work, and could use more time in the 'I do,' category, as I assume will come with practice of pacing the lesson and familiarity with the curriculum. I noticed I was more consistent with verbally introducing ideas and performing 'I do' tasks but could visually show as I am talking. Overall, I am satisfied and proud of the growth I can not only see but feel while I am in the classroom. In the future I want to strive to offer more I do We Do You Do instruction, provide even more visuals and models, and continue to strengthen my presence and energy in the classroom.

NAME | DATE

Tile Pools page 1 of 2

1 Here are the first five arrangements in the tile pool sequence. In the box below each arrangement, write the number of gray tiles it took to build the border for each.

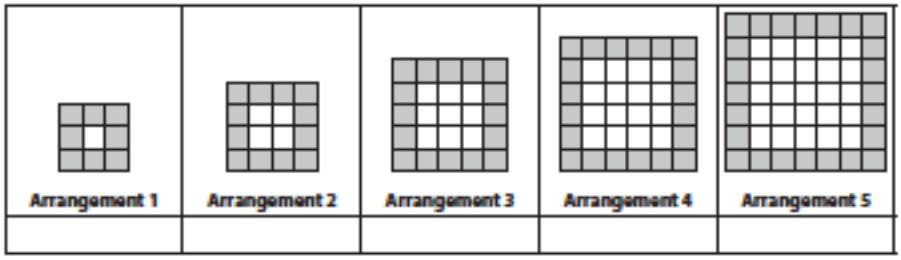


Arrangement 1	Arrangement 2	Arrangement 3	Arrangement 4	Arrangement 5

2 Write an ordered pair to represent each of the pool borders in the sequence. Use the arrangement number for the first number in the pair, and the number of gray tiles it took to make the border around the pool for the second number in the pair.

Arrangement 1	Arrangement 2	Arrangement 3	Arrangement 4	Arrangement 5
(____, ____)	(____, ____)	(____, ____)	(____, ____)	(____, ____)

3 Here is another picture of the first five arrangements in the tile pool sequence. In the box below each arrangement, write the number of white tiles it took to build the water.



Arrangement 1	Arrangement 2	Arrangement 3	Arrangement 4	Arrangement 5

4 Write an ordered pair to represent each of the water areas in the sequence. Use the arrangement number for the first number in the pair, and the number of white tiles it took to make the water in the pool for the second number in the pair.

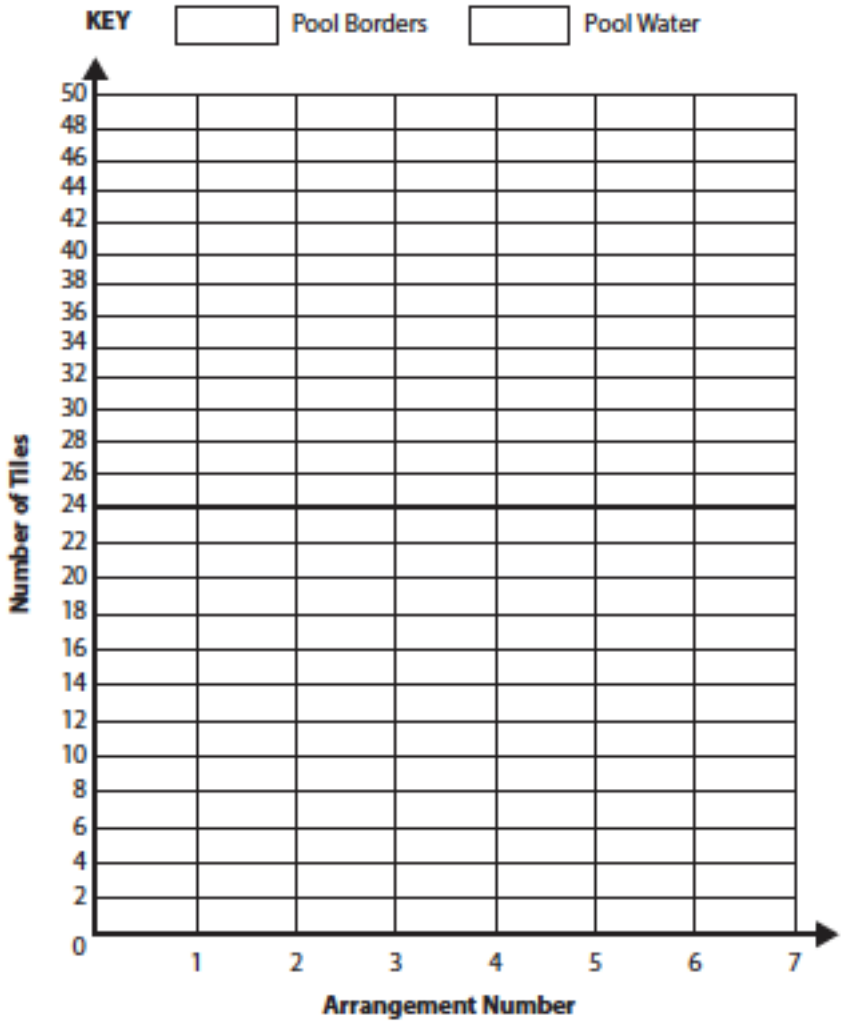
Arrangement 1	Arrangement 2	Arrangement 3	Arrangement 4	Arrangement 5
(____, ____)	(____, ____)	(____, ____)	(____, ____)	(____, ____)

(continued on next page)

NAME | DATE

Tile Pools page2 of 2

5 Graph and label the ordered pairs for both parts of each pool—the borders, and the water. Use a different color for each sequence, and fill in the key to show which is which.



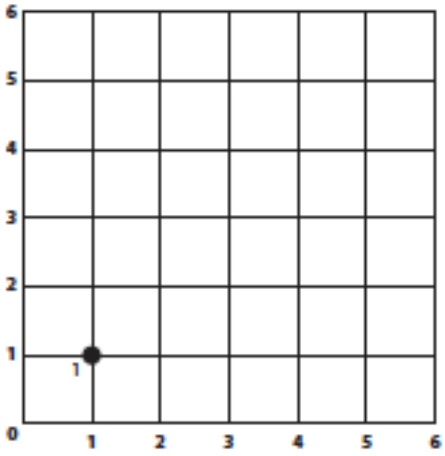
6 In your journal, describe the shape of each graph, and tell why you think the two are so different.

NAME | DATE

More Coordinate Dot-to-Dots

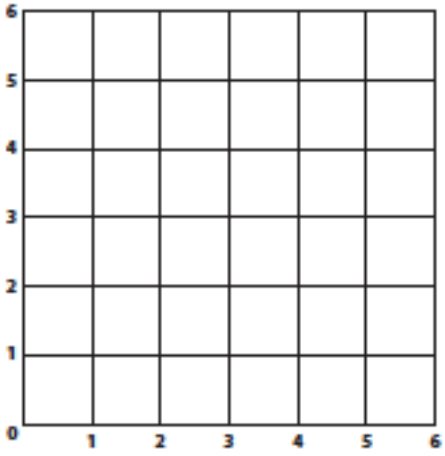
1 On the grid below, draw and number a dot at each of the ordered pairs on the list. Connect the dots in order to make a picture. The first dot is drawn for you.

(1, 1) ①
(3, 4) ②
(5, 1) ③
(1, 3) ④
(5, 3) ⑤
(1, 1) ⑥



2 Make up your own dot-to-dot picture on the grid below. Use at least 12 points for your picture. List the coordinates for your picture in order.

(____, ____) ①
(____, ____) ②
(____, ____) ③
(____, ____) ④
(____, ____) ⑤
(____, ____) ⑥
(____, ____) ⑦
(____, ____) ⑧
(____, ____) ⑨
(____, ____) ⑩
(____, ____) ⑪
(____, ____) ⑫
(____, ____) ⑬
(____, ____) ⑭
(____, ____) ⑮
(____, ____) ⑯
(____, ____) ⑰



NAME | DATE

Anthony's Problem page 1 of 2

Anthony is a junior in high school. He decided to get a job this summer so he could put some money in his college savings account. His goal was to put $1,000 into his account, but still have time to rest up before school started again. He is a very good math student who loves computers, and he was lucky to be offered a summer job with two different software companies.

Company 1 offered to pay Anthony $1 on the first day and double the amount each day ($1 the first day, $2 the next day, $4 the third day, $8 the fourth day, and so on).

Company 2 offered to pay Anthony $75 every day.

Which job should Anthony accept if he wants to reach his goal of earning $1,000 as quickly as possible?

1 On the next page, fill in the table for each company's payment plan. You can stop as soon as the total amount of money reaches or goes over $1,000 for a plan, and then do the other one.

2 On the next page, graph the running totals for each day. Graph each plan in a different color, and mark the key at the bottom of the sheet to show which is which.

3 Which company's plan turned out to be best? Why?

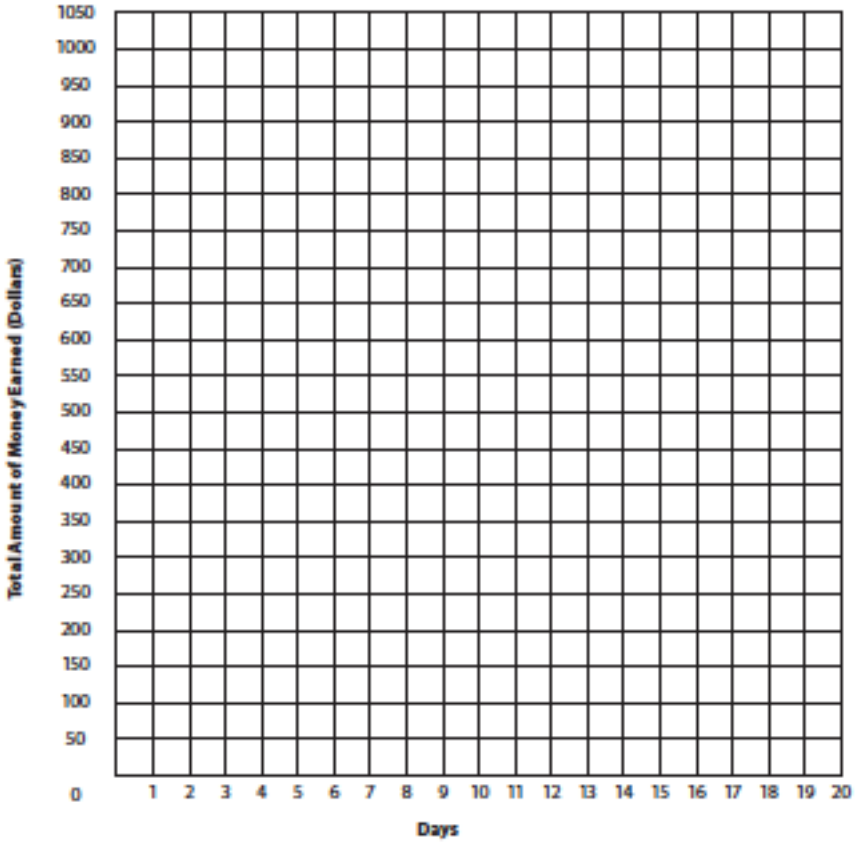
NAME | DATE

Anthony's Problem page 2 of 2

Company 1 Payment Plan			Company 2 Payment Plan		
Day	Daily Amount (Dollars)	Running Total (Dollars)	Day	Daily Amount (Dollars)	Running Total (Dollars)
1	$1		1	$75	
2	$2		2	$75	
3	$4		3	$75	
4	$8		4	$75	
5			5		
6			6		
7			7		
8			8		
9			9		
10			10		
11			11		
12			12		
13			13		
14			14		
15			15		
16			16		
17			17		
18			18		
19			19		
20			20		

NAME | DATE

Graphing the Two Payment Plans



Key	
Plan 1	Plan 2

NAME | DATE

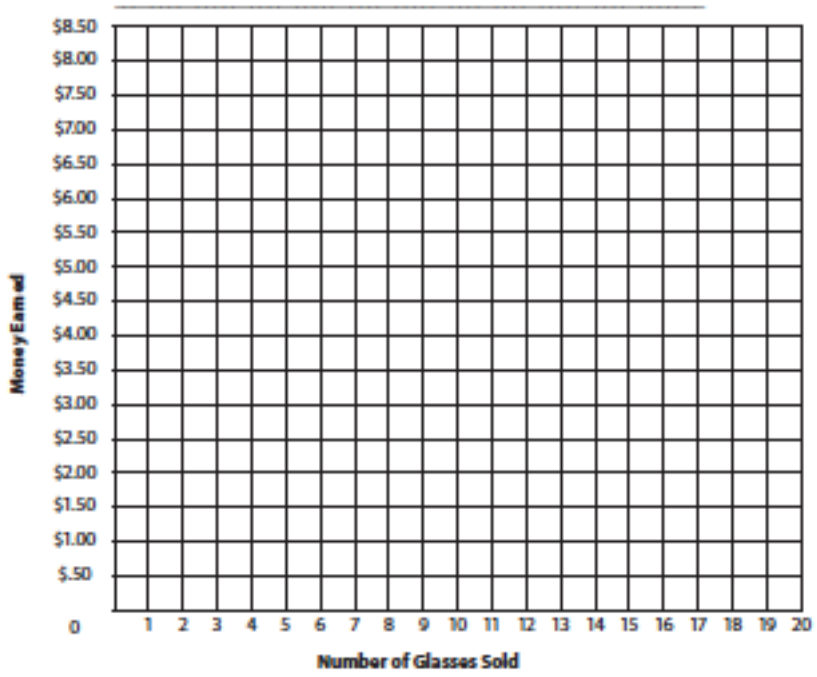
The Lemonade Stand page 1 of 4

Troy and his little sister are going to sell lemonade to earn money for the wildlife refuge near their home. Troy's parents have agreed to pay for the ingredients and the cups. The kids are going to charge 50¢ a glass for their lemonade.

1 Fill in the table below to show how much money they'll earn.

Number of glasses sold	1	2	3		5		7	8	9	
Money earned	$0.50		$1.50			$3.00				$5.00

2 Use the grid below to graph the amount of money they'll earn as they sell glasses of lemonade. Give your graph a good title.



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NAME | DATE

The Lemonade Stand page 2 of 4

3 Why do the points on the graph form a straight line?

4 The first day they opened their lemonade stand it was really hot. Troy and his sister sold 24 glasses of lemonade between noon and 3:00 pm. How much money did they make? Show your work.

5 Between 1:00 pm and 5:00 pm on the second day, they made $14.50. How many glasses of lemonade did they sell during those 4 hours? Show your work.

(continued on next page)

NAME | DATE

The Lemonade Stand page 3 of 4

6 What do you have to do to figure out how much money they'll earn for selling any number of glasses of lemonade? Give your answer in words, and then write an equation to match.

7 Their goal is to earn $75.00 for the wildlife refuge. How many glasses of lemonade will they need to sell to reach their goal? Show your work.

8 Here is a recipe for 1 glass of lemonade:

$1\frac{1}{2}$ tablespoons lemon juice
$\frac{1}{4}$ cup sugar
1 cup of water

The pitcher the kids were using held 8 glasses of lemonade. How much lemon juice, sugar, and water did it take to make enough lemonade to fill the pitcher? Show your work.

(continued on next page)

NAME | DATE

The Lemonade Stand page 4 of 4

9 **CHALLENGE** Use your answer to problem 7, along with the information below, to figure out how much it cost Troy's parents to buy the ingredients for all the lemonade they sold. (The kids did reach their goal of earning $75.00 exactly.) Show all of your work.

- A 1-quart bottle of lemon juice costs $2.95.
- There are 16 tablespoons in a cup and 4 cups in a quart.
- A 5-pound bag of sugar costs $3.29.
- There are $11\frac{1}{4}$ cups of sugar in a 5-pound bag.

NAME | DATE

Miranda's Number Patterns

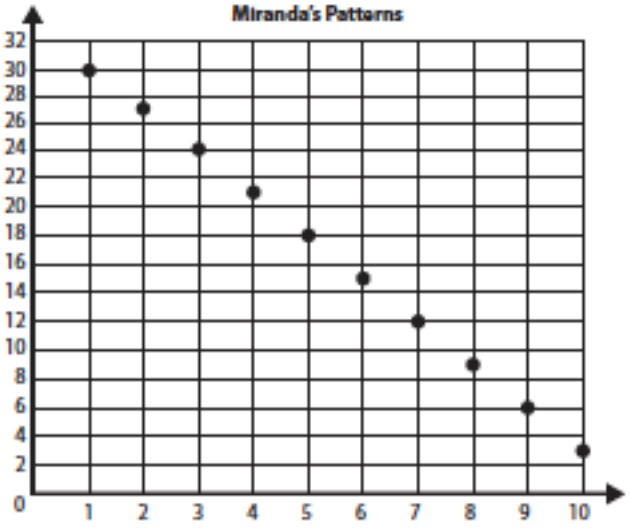
1 Miranda made a number pattern. She started with 4 and added 3 several times. Continue Miranda's pattern: 4, 7, 10, ____, ____, ____, ____.

2 Miranda made another number pattern. She started at 30 and subtracted 3 each time. Continue Miranda's new pattern: 30, 27, 24, ____, ____, ____, ____.

3 Compare Miranda's patterns. Write two observations about how her number patterns are alike, and two observations about how her number patterns are different.

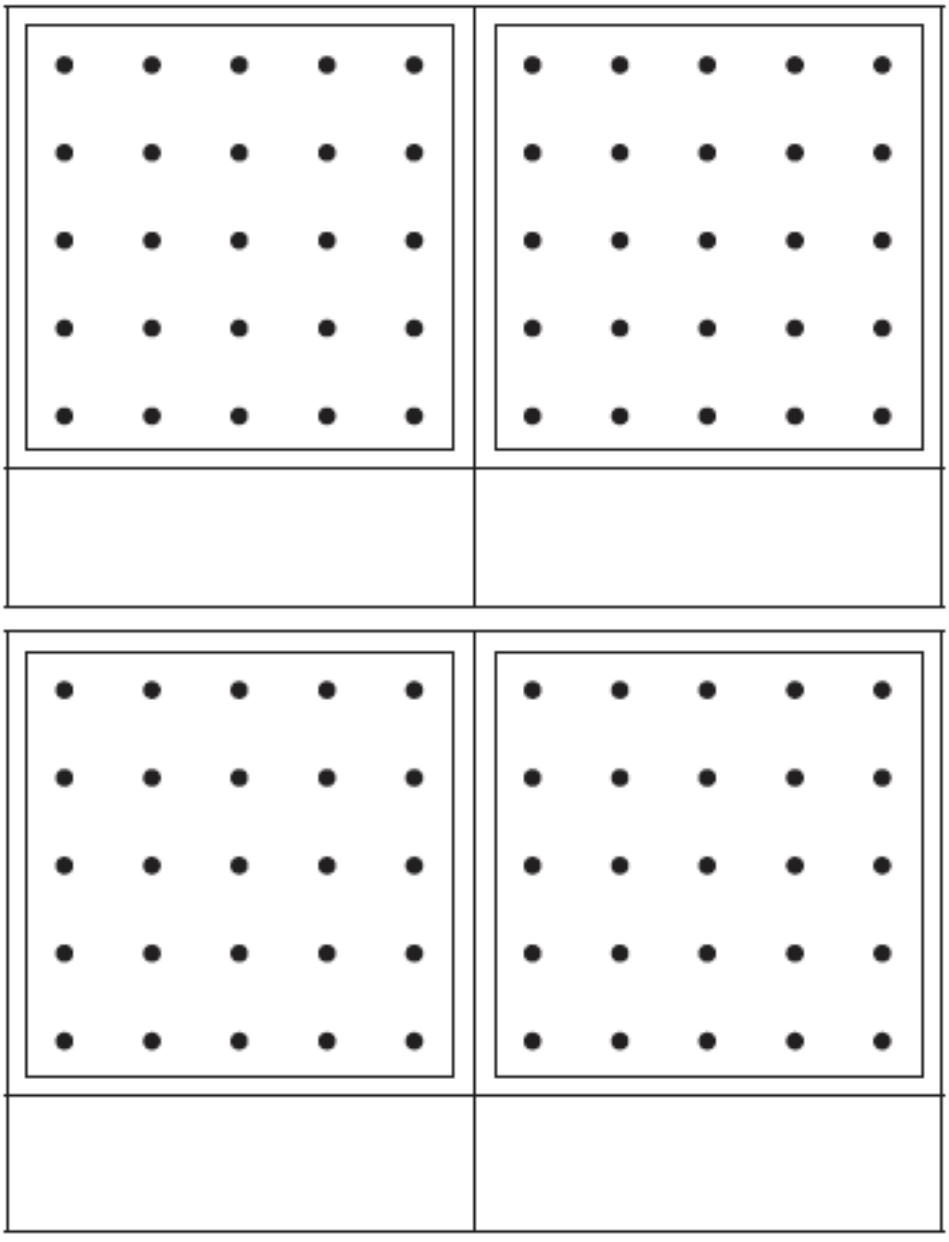
4 Miranda graphed one of her patterns on the coordinate grid below.

- Did Miranda graph her first or her second pattern? _____
- Label the ordered pairs that Miranda graphed.
- Graph and label the ordered pairs in Miranda's other pattern.



NAME | DATE

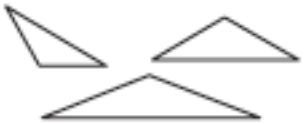
Triangles Record Sheet



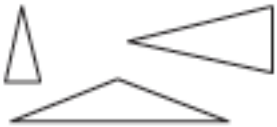
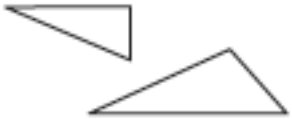
NAME | DATE

Types of Triangles page 1 of 2

You can group triangles by the size of their angles.

Acute triangles All 3 angles are acute.	Right triangles 1 angle is a right angle.	Obtuse triangles 1 angle is an obtuse angle.
		

You can also group triangles by the lengths of their sides.

Equilateral triangles All 3 sides are the same length.	Isosceles triangles 2 sides are the same length.	Scalene triangles No sides are the same length.
		

1 Look carefully at the triangles below and fill in the chart.

Triangle	Acute Angles?	Right Angles?	Obtuse Angles?	Congruent Sides?	What Kind? (circle as many as apply)
a 					acute equilateral right isosceles obtuse scalene
b 					acute equilateral right isosceles obtuse scalene

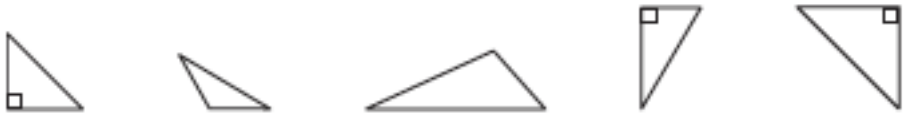
2 Circle the *right triangle* (one right angle) that is also an *isosceles triangle* (two sides the same length).

(continued on next page)

NAME | DATE

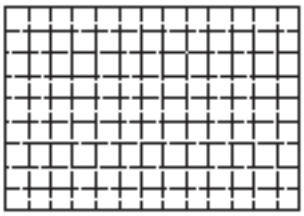
Types of Triangles page 2 of 2

3 Circle the *right triangle* (one right angle) that is also a *scalene triangle* (no sides the same length).

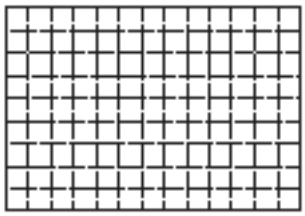


4 Draw the triangles described below.

a An obtuse isosceles triangle

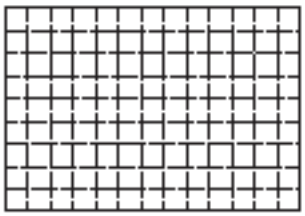


b An acute isosceles triangle



5 **CHALLENGE** Lawrence said he drew a right obtuse triangle. Rosa said that was impossible. Explain why Rosa is correct.

Hint The sum of the angle measures in any triangle is 180°.



NAME | DATE

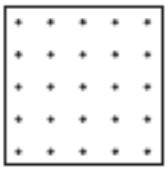
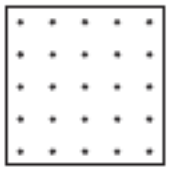
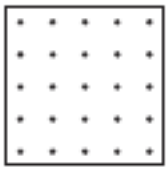
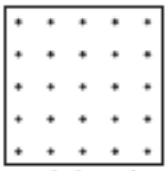
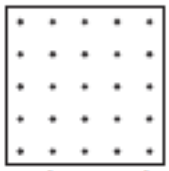
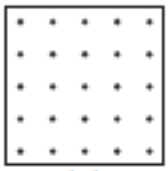
More Geoboard Triangles

Remember that you can classify and describe triangles in two different ways:

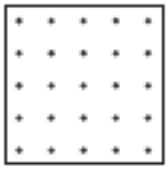
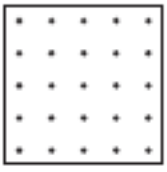
by the size of their angles		
 **Acute Triangle** All 3 angles are acute.	 **Right Triangle** One of the angles is a right angle.	 **Obtuse Triangle** One of the angles is obtuse.

by the length of their sides		
 **Isosceles Triangle** Two sides are the same length.	 **Scalene Triangle** Each side is a different length.	 **Equilateral Triangle** All 3 sides are the same length.

1 Follow the instructions below each geoboard to draw some different triangles.
Hint Build your triangles on a geoboard first. Then copy them onto the paper.

 an acute triangle	 an obtuse triangle	 a right triangle that is also isosceles
 a right triangle that is also scalene	 an obtuse triangle that is also isosceles	 a scalene triangle that is not obtuse

2 **CHALLENGE** Dana says it is impossible to draw a right triangle that is also acute. Do you agree with her? Why or why not? Use the geoboards below to test your ideas. Explain your ideas in writing.

STEP Standard 6 - Analysis of Student Learning

After you have implemented each lesson in the unit, as well as completed the post-assessment, collaborate with your cooperating teacher/mentor to analyze the results of the post-assessment and determine student learning. Review your data and whether there is a student or group of students who have not mastered the objectives and discuss what you will do to further develop students' knowledge and skills.

Post-Test Data: Whole Class - Once you have assessed your students' learning on the topic, collect and analyze the post-test data to determine the effectiveness of your instruction and assessment.

	Number of Students Pre-Test	**Number of Students Post-Test**
Highly Proficient (90%-100%)	1	11
Proficient (80%-89%)	2	3
Partially Proficient (70%-79%)	2	2
Minimally Proficient (69% and below)	19	8

Post-Test Analysis: Whole Class [Average 78%] increased from a 47% by 31%

Based on your analysis of the whole class post-test data, what is your interpretation of the students learning? Cite examples and provide evidence of student learning that helped you come to this conclusion.

Based on post-test data, students increased their knowledge, scored higher than their pre-assessment as well as moved to a different grading bracket. As noted above, almost 80% of the class scored 'Minimally Proficient,' specifically in areas with graphing ordered pairs and identifying values of *x* and *y*. The check-point over Unit 6, 'Graphing Patterns,' tested this skill and showed an increase of understanding and performance. For example, their ability to accurately graph and label an ordered pair on a coordinate plane went from a 29% to 83%, showing a growth in comprehension and performance by 54%. It is also clear while looking at the post-assessment data, 19 students who scored 69% and below, shows an overall class growth of students scoring out of 'Minimally Proficient' and into higher percentage categories. The most positive growth is seen in the difference between data in the 'Highly Proficient' category, where just under half of the class scored 90%-100%.

Based on the whole class post-test data, write one paragraph analyzing the effectiveness of your instruction and assessment and effect on student learning. Cite examples and provide evidence of student learning to support this analysis.

As the data being compared involves students prior to the unit 6 implementation, it was apparent that two of the weakest skills were the ability to identify the value of x and y and graphing ordered pairs. This drove instruction by making anchor charts of those vocabulary words, review the

components of a coordinate plane and how to read ordered pairs. This effected student learning by recalling prior knowledge, supporting different learners by providing visuals and manipulatives, as well as supplementing online resources that can track their progress in learning.

Post-Assessment Analysis: Subgroup Selection

Using the information obtained in Standard 1(Student Academic Factors section), select one subgroup population to focus on for this analysis. Provide a brief rationale for your selection (1-3 sentences).

I chose the 2 students who have 504's to focus on for this analysis. I chose this subgroup because they both have RTI plans that support the students in math with pullouts, extra time and read aloud, the accommodations listed under 'Student Academic Factors in the STEP section 2 template. I have attended RTI meetings with my cooperating teacher and supporting staff and was interested to see the growth based on updated plans.

Post-Assessment Data: Subgroup (Gender, ELL population, Gifted, students on IEPs or 504s, etc.)

	Number of Students Pre-Test	**Number of Students Post-Test**
Highly Proficient (90%-100%)	0	0
Proficient (80%-89%)	0	1
Partially Proficient (70%-79%)	0	1
Minimally Proficient (69% and below)	2	0

Post-Assessment Analysis: Subgroup

Based on your analysis of the subgroup post-test data, what is your interpretation of the student learning? Cite examples and provide evidence of student learning that helped you come to this conclusion.

Based on the analysis of the post-assessment data, both students showed growth in the concepts and skills being assessed. Both students tested in the 'Minimally Proficient' category, each scoring below 40%. Post test data showed improvement in the continuous learning in Unit 6, increasing scores to move to the 'Partially Proficient' and 'Proficient' category. One student went from a 35% to a 75% while the other sky rocketed from a 20% to 83%.

Based on the subgroup class post-test data, write one paragraph analyzing the effectiveness of your instruction and assessment and effect on student learning. If there is a student or group of students who have not mastered the objectives, discuss what you will do in future days to aid students' understanding with respect to the unit's objectives. Cite examples and provide evidence of student misconceptions to support this analysis.

All in all, students have shown great growth and a deeper understanding of identifying the value of x and y and plotting an ordered pair on a coordinate graph. Students not only were able to accurately plot the ordered pairs on the graph, but could find patterns or comparisons between two or more sets of ordered pairs. The effectiveness of instruction and assessment can be seen throughout the level of engagement during lessons and an increase in scores throughout the students in class. Also attributing to the effectiveness during instruction is the increased use of math manipulatives and visuals. One of the biggest misconceptions about the value and plotting the ordered pair, was the order in which you go right to left or up or down first. This was then observed and clarified with a visual analogy: 'you have to walk on the floor before going up or down on an elevator.' Another one used for the y-axis was a yo-yo traveling up and down. This analogy then helped students accurately identify what axis was which and how to correctly plot an ordered pair. This was a strong weakness on the pre-test assessment and saw enormous growth on the check-point. Since there were multiple modes of the lesson working with identifying, plotting and using coordinate graphs to determine patterns, students were exposed to and able to practice these skills at least once or twice a day, then building upon the skill each lesson.

Post-Assessment Data: Remainder of Class

	Number of Students Pre-Test	**Number of Students Post-Test**
Highly Proficient (90%-100%)	1	11
Proficient (80%-89%)	2	2
Partially Proficient (70%-79%)	2	1
Minimally Proficient (69% and below)	17	8

Post-Assessment Analysis: Subgroup and Remainder of Class

Analyze the data of the subgroup as compared to the remainder of the class. In one paragraph, describe the effectiveness of your instruction for this unit using the finding from your analysis.

Comparing these two groups, percentage and content growth can be observed. The difference between the sub-group and the remainder of the class is the accommodations of small group, extra time, read aloud, and RTI pull out plans that come from a 504. Even though the sub-group has those 504 accommodations, those students still function like the remainder of the class who are participating, using math manipulatives and completing independent work in class. In contrast, the sub-group didn't end up jumping score brackets quite as much as almost 50% of the class did, but yet the sub-group still improved overall, both moving score brackets. This proves the effectiveness of instruction by showing mastery in the skill being tested.

Based on your analysis of student learning, discuss the next steps for instruction, including an objective that would build upon the content taught in this unit of instruction.

The next steps for instruction are to cover the second half of the pre-assessment, Geometry. Based on pre-assessment data, a weakness was the ability to identify shapes by characteristics. During instruction, it is important to offer drawings, notes, definitions, and even hands-on activities such as creating a hanging mobile of the hierarchy of quadrilaterals. As this was one of the weakest points on the pre-assessment, this standard will drive instruction in order to prepare the students for the Unit 6 summative assessment. In their journals, students will have a hierarchy of polygons, that categorize triangles, quadrilaterals, pentagons and hexagons by category and sub-categories, such as angle sizes and side lengths. This will prepare students to categorize shapes by their characteristics, something that was quite muddy when taking the pre-assessment. One objective to build upon the content taught in unit 6 is: Students will be able to classify two-dimensional figures in a hierarchy based on properties.

STEP Standard 7 – Reflecting on Instruction to Improve Student Progress

Improved Practice Based on the Unit of Study

Based on the experience of developing and delivering your instructional unit, list three short-term goals to improve specific areas of your teaching practice based on the unit of instruction and describe your plan to reach each short-term goal.

Short-Term Goal	**Plan to Reach the Goal** *(i.e., professional development, research on the Internet, observation of a veteran teacher, etc.)*
1. Continue to explore use of technology resources	I would like to continue to explore the use of technology and the resources it can provide to support the academic learning of students. I want to broaden my experience using these programs to enhance lessons and provide additional assessments, extensions or review: programs such as Freckle, Prodigy, etc.
2. Research assessment/differentiation methods	During instruction, I felt confident in the above, at, and below average expectations for the students; however, I want to continue to research and explore the different ways students can show mastery in a lesson. In my current classroom, there are high ability and at grade level students, which is different from the diversity in my previous class. I hope to gain insight from my cooperating teacher and develop my own style of assessment.
3. Inspire learners/creative questions	As I continue the last 8 weeks of student teaching, I want to constantly be working towards asking students the right questions to lead to successful answers. I feel I try to invest in a student not only academically but personally, to achieve the best way to connect and build a positive relationship. Through professional development opportunities, observing veteran teachers and research, I want to develop an assortment of creative questions that use higher order thinking, creative thinking and different strategies to inspire and promote academic and person growth in the student as well as myself as an educator.

Long-Term Goals: Teachers who are dedicated to their profession and to improving the lives of students will continually look for ways to grow and learn. The best way to ensure that learning is prioritized is to create a long-term goal. Create one long term goal that is specific and measurable. Make sure to discuss the following:

Long-Term Goal: Create unit plan(s) on Freckle	
Rationale: Why did you choose this goal? How do you expect it to improve the outcomes of your future students?	I chose this goal because I observed this online platform being used multiple times during student teaching. The use of this program will improve the outcome of future students by assessing and tracking student data and growth, as well as aid in the creation of groups and additional resources or review for academic support where needed.
End Date: By when do you expect to accomplish this goal?	As I hope to continue to grow and find my own style and groove of teaching, I plan to have an understanding grip on Freckle and the way it can be utilized in the classroom by the end of my first year teaching. This timeline will set the goal in motion and motivate the exploration to better support academic needs in the classroom. By beginning of 2020 school year, I would like to have enough understanding to look to Freckle for math practice, and hope assessment and data driven instruction will develop over the first year of teaching and many years to come.
Action Timeline: What steps will you take to complete this goal, and by when will you take them? Example: 1/31/18: Join AACTE	Summer 2020: create an account to become familiarized with navigating the learning platform Fall Semester 2020: create a course within Freckle and have the ability to assign assignments based on grade level. Spring Semester 2021: ability to assess students through Freckle, analyze data and have that data influence and drive instruction and create groups for extension or re-teaching.
Resources: What resources are available to assist you in accomplishing your goal?	Aside from self-exploration on this platform, my cooperating teacher for the first 8 weeks is very familiar with Freckle and utilizes it often to engage, assess and refresh 5th grade math. She is and will continue to be a great resource to collaborate with in accomplishing this goal.