Unit Plan

Grade 6 **Math**

Unit 1

Student E-Workbook (English) (Spanish)	Scope and Sequence	Curriculum Map/Pacing Guide	Instructional Routines	Home Connections (English) (Spanish)

Fluency Games	Course Glossary

Grade 6, Unit 1: Area and Surface Area

Duration - 4 weeks (20 days)
Consists of 19 lessons and 10 mini lessons

Unit Overview

Unit Theme:
Students engage with mathematical contexts to understand the concept of area, to calculate the area of parallelograms and triangles, and to calculate the surface area of three-dimensional figures, using nets. In the culminating lesson of this unit, students use what they learned in this unit to design a tent and determine how much fabric is needed for the tent.

Content Standards:

- **CC.6.EE.1** Write and evaluate numerical expressions involving whole-number exponents.
- **CC.6.EE.2a** Write expressions that record operations with numbers and with letters standing for numbers. For example, express the calculation "Subtract y from 5" as 5 – y.
- **CC.6.EE.2c** Evaluate expressions at specific values of their variables. Include expressions that arise from formulas used in real-world problems. Perform arithmetic operations, including those involving whole-number exponents, in the conventional order when there are no parentheses to specify a particular order (Order of Operations). For example, use the formulas $V = s^3$ and $A = 6\ s^2$ to find the volume and surface area of a cube with sides of length $s = \frac{1}{2}$.
- **CC.6.G.1** Find the area of right triangles, other triangles, special quadrilaterals, and polygons by composing into rectangles or decomposing into triangles and other shapes; apply these techniques in the context of solving real-world and mathematical problems.
- **CC.6.G.2** Find the volume of a right rectangular prism with fractional edge lengths by packing it with unit cubes of the appropriate unit fraction edge lengths, and show that the volume is the same as would be found by multiplying the edge lengths of the prism. Apply the formulas V = l w h and V = b h to find volumes of right rectangular prisms with fractional edge lengths in the context of solving real-world and mathematical problems.
- **CC.6.G.4** Represent three-dimensional figures using nets made up of rectangles and triangles, and use the nets to find the surface area of these figures. Apply these techniques in the context of solving real-world and mathematical problems.

Refer to the Achieve the Core Coherence Map

Enduring Understandings:

As students engage with the tasks in this unit, the following enduring understandings are addressed:

- Shapes can be decomposed and rearranged to more easily calculate their area.
- Figures that match up exactly have equal areas.
- Any side of a parallelogram or a triangle can be considered its base.
- The area of a triangle is half that of a parallelogram with the same base and height.
- Surface area is the area of all the faces of a 3-D object.
- Surface area is measured in square units and volume is measured in cubic units.

Essential Questions:

- Lesson 1: What is area?
- Lesson 2 and 3: How can we find area by decomposing shapes and rearranging shapes into known figures to find unknown areas?
- Lesson 4: How can I find the area of a two-dimensional figure?
- Lessons 5 and 6: How can I find the area of a two-dimensional figure? How can a figure have more than one base-height pair?
- Lessons 7 and 8: How can we find area by decomposing shapes and rearranging shapes into known figures to find unknown areas? How can I find the area of a two-dimensional figure?
- Lessons 9 and 10: How can I find the area of a two-dimensional figure? How can a figure have more than one base-height pair?
- Lesson 11: How can we find area by decomposing shapes and rearranging shapes into known figures to find unknown areas?
- Lesson 12: How can I compute the surface area of rectangular prisms?
- Lessons 13, 14, 15, and 19: How can I use nets to help compute the surface areas of rectangular and triangular prisms and pyramids?
- Lesson 16: How are surface area and volume different?
- Lessons 17 and 18: How do exponents help communicate the units of volume and area?

Acquisition / Skill Mastery:

By the end of this unit, students will be able to:

- Explain the meaning of area.
- Find the area of a figure by decomposing it and rearranging the parts and by enclosing shapes and subtracting.
- Identify bases and heights of parallelograms and triangles.
- Use the area formula to find the area of a parallelogram.
- Use the area formula to find the area of a triangle.
- Find the area of a polygon, by decomposing it into rectangles and triangles.
- Use nets to find the surface area of a prism or pyramid.
- Understand the difference between surface area and volume.
- Write and explain the formula for the volume of a cube, including the meaning of the exponent.

WIDA Standards Alignment

WIDA Standards have been used in the development of the course lessons. There are two WIDA standards that the lessons are aligned to. These include:

Standard 1: Social and Instructional Language
- Domains: Listening, Speaking

Standard 3: The Language of Mathematics
- Domains: Listening, Speaking, Reading, Writing

Language Standards:
Throughout the unit, the curriculum encourages reading, writing, speaking and listening, provides opportunities for discourse, both student to student and student to teacher, and incorporates Language Routines.

Each individual TFG provides more specificity at the lesson level. Reference the TFG for MPIs and specific supports provided for varied English proficiency levels.

EL Support Mini Lessons	Learning Objective and Language Objective
6U1L1-3 Mini Lesson A: Compose and Decompose (This mini lesson can be used between Lessons 1-3) TFG ● Playlist ● Spanish Playlist ● Virtual Manipulative from RoomRecess.com: 9 piece puzzles (optional) ● Virtual Card Sort from Desmos: Compose/Decompose ○ Betsy Urschel. 2021. ● Blackline Master: Compose and Decompose ● Blackline Master in Spanish: Compose and Decompose ● Blackline Master: Puzzle (optional) ● Blackline Master in Spanish: Puzzle (optional)	● **Learning Objective:** I can describe what the words compose and decompose mean and identify when shapes are composed and decomposed. ● **Language Objective:** Explain and justify why representations reflect composing a shape or decomposing a shape, by using supports such as virtual manipulatives, visuals, and working with a small group.
6U1L12-19 Mini Lesson B: Area or Surface Area (This mini lesson can be used between Lessons 12-19) TFG ● Playlist ● Spanish Playlist ● Virtual Card Sort from Desmos: Area or Surface Area ○ Betsy Urschel. 2021. ● Blackline Master: Area or Surface Area ● Blackline Master in Spanish: Area or Surface Area	● **Learning Objective:** I can describe what the words compose and decompose mean and identify when shapes are composed and decomposed. ● **Language Objective:** Explain and justify why representations reflect composing a shape or decomposing a shape, by using supports such as virtual manipulatives, visuals, and working with a small group.
Related Topics: Not applicable to the lessons in this unit.	

💙 SEL Standards Alignment

ISBE Social and Emotional Learning Standards:

- **SEL Standards have been used in the development of the course lessons. Each individual TFG provides more specificity at the lesson level. Reference the TFG for specific supports.**

- Goal 1: Develop self-awareness and self-management skills to achieve school and life success.
    - 1B Recognize personal qualities and external supports
        - 1B.3b Analyze how making use of school and community supports and opportunities can contribute to school and life success. (Lessons 3, 4, 6)
    - 1C Demonstrate skills related to achieving personal and academic goals
        - 1C.3a Set a short-term goal and make a plan for achieving it. (Lesson 19)
        - 1C.3b Analyze why one achieved or did not achieve a goal. (Lesson 9)
- Goal 2: Use social-awareness and interpersonal skills to establish and maintain positive relationships.
    - 2B. Recognize individual and group similarities and differences.
    - 2B.2a Identify differences among and contributions of various social and cultural groups (Lessons 1, 13)
    - 2C. Use communication and social skills to interact effectively with others.
        - 2C.3b Demonstrate cooperation and teamwork to promote group effectiveness. (Lessons 1-19)

Opportunities for Discourse:
The lessons and teacher implementation support are designed to create a student-centered, problem-based classroom. Therefore, each lesson in this unit provides opportunities for student discourse, ranging from pairs to small group to whole class.

Warm-Ups include:
- Class and partner discussion in Lessons 2, 4, 5, 8, 10, 12, 14, 15, 16
- Class and small group discussion in Lessons 1, 11, 13
- Class discussion in Lessons 3, 6, 7, 9, 17, 18
- Partner discussion in Lesson 19

Activities include:
- Partner discussion in Activities 1.1

- Class and partner discussion in Activities 2.1, 2.2, 3.1, 5.1, 5.2, 10.2, 11.2, 12.2, 15.1, 16.2, 17.1, 17.2, 17.3, 18.1
- Class and small group discussion in Activities 3.2, 4.1, 4.2, 6.1, 7.1, 7.2, 8.1, 9.1, 9.2, 11.1, 11.3, 12.1, 13.1, 13.2, 14.1, 15.2, 19.1
- Class discussion in Activities 8.2, 16.1, 18.2

Assessment

Pre-Unit Assessments:
A Pre-Unit assessment is available that may be given at the beginning of the unit.

- The Pre- Unit Assessment is located in Lesson 1 (English) and (Spanish)
- Mid-Unit Assessment is located in Lesson 11 (English) and (Spanish)

Formative Assessments:
Each lesson in this unit has a Cool Down that assesses student understanding of the lesson objectives. Additionally, the Cool Downs provide an opportunity for students to self-assess their work and learning during the lesson.

Each lesson, except Lesson 17, the culminating lesson, has a set of Practice Problems. The practice problems may be assigned for independent or small group practice at the discretion of the teacher.

Additionally, the lesson warm-ups and activities provide opportunities during the explore and summarize phase for the teacher to formatively assess students during the lesson.

Lesson Level Assessments:
This unit has five Quick Quizzes:

- Grade 6 Unit 1: Quick Quiz 1 to be given after Lesson 3 (English) and (Spanish)
- Grade 6 Unit 1: Quick Quiz 2 to be given after Lesson 6 (English) and (Spanish)
- Grade 6 Unit 1: Quick Quiz 3 to be given after Lesson 9 (English) and (Spanish)
- Grade 6 Unit 1: Quick Quiz 4 to be given after Lesson 12 (English) and (Spanish)

- Grade 6 Unit 1: Quick Quiz 5 to be given after Lesson 15 (English) and (Spanish)

Summative Assessment:
A summative assessment is available that may be given at the end of the unit.

- The End of Unit Assessment is located in Lesson 19 (English) and (Spanish)

Assignments & Performance Tasks:
Lessons 1 – 18 have a set of practice problems. These problems provide students practice on the content of the corresponding lesson, as well as problems from previous lessons and units as a spiral review.

Lesson 19, the last lesson of this unit, provides students an opportunity to apply the understandings and mathematical concepts from the previous lessons.

Transfer:
This unit provides a foundation for future work with area and surface area in contextual situations. This is students' first experiences with finding areas of polygons other than rectangles, and finding the surface area of 3-dimensional shapes. Many of the lessons in this unit ask students to work on geometric figures that are not set in a real-world context. This design choice respects the significant intellectual work of reasoning about area. Tasks set in real-world contexts that involve areas of polygons are often contrived and hinder rather than help understanding.

*This unit divides the lessons into seven sections. The lessons within each section work together to build specific understandings as noted.

Section 1: Section 1: Reasoning to Find Area

Lesson 1: Tiling the Plane TFG and Playlist
Students start the first lesson of the school year by recalling what they know about area. The lesson uncovers two important ideas:

- If two figures can be placed one on top of the other so that they match up exactly, then they have the same area.
- The area of a region does not change when the region is decomposed and rearranged.

Learning Objectives:

- Compare (orally) areas of the shapes that make up a geometric pattern.
- Comprehend that the word “area” (orally and in writing) refers to how much of the plane a shape covers.

Content Standards:

Addressing: CC.3.G.1 Understand that shapes in different categories (e.g. rhombuses, rectangles, and others) may share attributes (e.g., having four sides), and that the shared attributes can define a larger category (e.g., quadrilaterals). Recognize rhombuses, rectangles, and squares as examples of quadrilaterals that do not belong to any of these subcategories.
CC.3.G.2 Partition shapes into parts with equal areas. Express the area of each part as a unit fraction of the whole. For example, partition a shape into 4 parts with equal area, and describe the area of each part as ¼ of the area of the shape.
Building Toward:CC.6.G.1 Find the area of right triangles, other triangles, special quadrilaterals, and polygons by composing into rectangles or decomposing into triangles and other shapes; apply these techniques in the context of solving real-world and mathematical problems.

Vocabulary:
Area
Region

Cool Down:
(English) and (Spanish)

Lesson 2: Finding Area by Decomposing and Rearranging TFG and Playlist

This lesson begins by revisiting the definitions for area that students learned in earlier grades. The goal here is to refine their definitions. Students also learn to reason flexibly about two-dimensional figures to find their area. They can:

- Compose a figure using smaller pieces with known area.
- Decompose a figure into shapes whose area we can determine and add the areas of those shapes.
- Decompose and rearrange the pieces into a different but familiar shape.

Learning Objectives:

- Calculate the area of a region by decomposing it and rearranging the pieces, and explain (orally and in writing) the solution method.
- Recognize and explain (orally) that if two figures can be placed one on top of another so that they match up exactly, they must have the same area.
- Show that area is additive by composing polygons with a given area.

Review Mini Lesson: Tangram Triangles Playlist

Content Standards:

Addressing:

- CC.6.G.1 Find the area of right triangles, other triangles, special quadrilaterals, and polygons by composing into rectangles or decomposing into triangles and other shapes; apply these techniques in the context of solving real-world and mathematical problems.

Building Toward:

- CC.6.G Solve real-world and mathematical problems involving area, surface area, and volume.

Vocabulary:
Area
Compose
Decompose

Cool Down:
(English) and (Spanish)

Lesson 3: Reasoning to Find Area TFG and Playlist

This lesson is the third of three lessons that use the following principles for reasoning about figures to find area:

- If two figures can be placed one on top of the other so that they match up exactly, then they have the same area.
- If a figure is composed from pieces that don't overlap, the sum of the areas of the pieces is the area of the figure. If a given figure is decomposed into pieces, then the area of the given figure is the sum of the areas of the pieces.

Following these principles, students can continue to use the strategies from Lesson 2, in addition to these two new strategies.

- Consider it as a shape with one or more missing pieces, calculate the area of the shape, then subtract the areas of the missing pieces.
- Enclose it with a figure whose area they can calculate, consider the result as a region with missing pieces, and find its area using the previous strategy.

Learning Objectives:

- Compare and contrast (orally) different strategies for calculating the area of a polygon.
- Find the area of a polygon by decomposing, rearranging, subtracting or enclosing shapes, and explain (orally and in writing) the solution method.
- Include appropriate units (in spoken and written language) when stating the area of a polygon.

Content Standards:	Vocabulary:
Building On: CC.3.MD.7.d Recognize area as additive. Find areas of rectilinear figures by decomposing them into non-overlapping rectangles and adding the areas of the non-overlapping parts, applying this technique to solve real world problems. ***Addressing:*** CC.6.G.1 Find the area of right triangles, other triangles, special quadrilaterals, and polygons by composing into rectangles or decomposing into triangles and other shapes; apply these techniques in the context of solving real-world and mathematical problems.	No new terms **Cool Down:** (English) and (Spanish)

Section 2: Parallelograms

Lesson 4: Parallelograms TFG and Playlist

In this lesson, students analyze the defining attributes of parallelograms, observe other properties that follow from that definition, and use reasoning strategies from previous lessons to find the areas of parallelograms.

By decomposing and rearranging parallelograms into rectangles, and by enclosing a parallelogram in a rectangle and then subtracting the area of the extra regions, students begin to see that parallelograms have related rectangles that can be used to find the area.

Throughout the lesson, students encounter various parallelograms that, because of their shape, encourage the use of certain strategies. For example, some can be easily decomposed and rearranged into a rectangle. Others—such as ones that are narrow and stretched out—may encourage students to enclose them in rectangles and subtract the areas of the extra pieces (two right triangles).

After working with a series of parallelograms, students attempt to generalize (informally) the process of finding the area of any parallelogram (MP8).

Learning Objectives:

- Compare and contrast (orally) different strategies for determining the area of a parallelogram.
- Describe (orally and in writing) observations about the opposite sides and opposite angles of parallelograms.
- Explain (orally and in writing) how to find the area of a parallelogram by rearranging or enclosing it in a rectangle.

Content Standards: ***Building On:*** **CC.4.G.2** Classify two-dimensional figures based on the presence or absence of parallel or perpendicular lines, or the presence or absence of angles of a specified size. Recognize right triangles as a category, and identify right triangles. **CC.5.G** Classify two-dimensional figures into categories based on their properties. ***Addressing:*** **CC.6.G.1** Find the area of right triangles, other triangles, special quadrilaterals, and polygons by composing into rectangles or decomposing into triangles and other shapes; apply these techniques in the context of solving real-world and mathematical problems.	**Vocabulary:** Parallelogram **Cool Down:** (English) and (Spanish)
Lesson 5: Bases and Heights of Parallelograms TFG and Playlist Students begin this lesson by comparing two strategies for finding the area of a parallelogram. This comparison sets the stage both for formally defining the terms base and height and for writing a general formula for the area of a parallelogram. By the end of the lesson, students both look for a pattern they can generalize to the formula for the area of a rectangle. **Learning Objectives:** ● Comprehend the terms “base” and “height” to refer to one side of a parallelogram and the perpendicular distance between that side and the opposite side. ● Generalize (orally) a process for finding the area of a parallelogram, using the length of a base and the corresponding height. ● Identify a base and the corresponding height for a parallelogram, and understand that there are two different base-height pairs for any parallelogram.	
Content Standards: ***Addressing:*** **CC.6.EE.2.a:** Write expressions that record operations with numbers and with letters standing for numbers. For example, express the calculation “Subtract y from 5” as 5 – y. **CC.6.EE.2.c:** Evaluate expressions at specific values of their variables. Include expressions that arise from formulas used in real-world problems. Perform arithmetic operations, including those involving whole-number exponents, in the conventional order when there are no parentheses to specify a particular order (Order of Operations).	**Vocabulary:** Base Height **Cool Down:** (English) and (Spanish)

For example, use the formulas $V = s^3$ and $A = 6\ s^2$ to find the volume and surface area of a cube with sides of length $s = 1/2$. **CC.6.G.1:** Find the area of right triangles, other triangles, special quadrilaterals, and polygons by composing into rectangles or decomposing into triangles and other shapes; apply these techniques in the context of solving real-world and mathematical problems.	

Lesson 6: Area of Parallelograms TFG and Playlist

This lesson allows students to practice using the formula for the area of parallelograms, and to choose the measurements to use as a base and a corresponding height. Through repeated reasoning, they see that some measurements are more helpful than others. For example, if a parallelogram on a grid has a vertical side or horizontal side, both the base and height can be more easily determined if the vertical or horizontal side is used as a base.

Learning Objectives:

- Apply the formula for area of a parallelogram to find the area, the length of the base, or the height, and explain (orally and in writing) the solution method.
- Choose which measurements to use for calculating the area of a parallelogram when more than one base or height measurement is given, and explain (orally and in writing) the choice.

Content Standards:	Vocabulary:
Building On: **CC.3.OA** Represent and solve problems involving multiplication and division. ***Addressing:*** ● **CC.6.EE.2.c** Evaluate expressions at specific values of their variables. Include expressions that arise from formulas used in real-world problems. Perform arithmetic operations, including those involving whole-number exponents, in the conventional order when there are no parentheses to specify a particular order (Order of Operations). For example, use the formulas $V = s^3$ and $A = 6\ s^2$ to find the volume and surface area of a cube with sides of length $s = 1/2$. ● **CC.6.G.1** Find the area of right triangles, other triangles, special quadrilaterals, and polygons by composing into rectangles or decomposing into triangles and other shapes; apply these techniques in the context of solving real-world and mathematical problems.	No new terms **Cool Down:** (English) and (Spanish)

Section 3: Triangles

Lesson 7: From Parallelograms to Triangles TFG and Playlist

This lesson prepares students to apply what they know about the area of parallelograms to reason about the area of triangles.

Highlighting the relationship between triangles and parallelograms is a key goal of this lesson. The activities make use of both the idea of decomposition (of a quadrilateral into triangles) and composition (of two triangles into a quadrilateral). The two-way study is deliberate, designed to help students view and reason about the area of a triangle differently. Students see that a parallelogram can always be decomposed into two identical triangles, and that any two identical triangles can always be composed into a parallelogram.

Learning Objectives:

- Describe (orally and in writing) ways in which two identical triangles can be composed, i.e., into a parallelogram or into a rectangle.
- Show how any parallelogram can be decomposed into two identical triangles by drawing a diagonal, and generalize (in writing) that this property applies to all parallelograms, but not all quadrilaterals.

Content Standards:	Vocabulary:
Addressing: **CC.6.G.1** Find the area of right triangles, other triangles, special quadrilaterals, and polygons by composing into rectangles or decomposing into triangles and other shapes; apply these techniques in the context of solving real-world and mathematical problems. ***Building Toward:*** **CC.6.G.1** Find the area of right triangles, other triangles, special quadrilaterals, and polygons by composing into rectangles or decomposing into triangles and other shapes; apply these techniques in the context of solving real-world and mathematical problems.	No new terms **Cool Down:** (English) and (Spanish)

Lesson 8: Area of Triangles TFG and Playlist

This lesson builds on students' earlier work decomposing and rearranging regions to find area. It leads students to see that, in addition to using area-reasoning methods from previous lessons, they can use what they know to be true about parallelograms (i.e. that the area of a parallelogram is bh) to reason about the area of triangles.

Students begin to see that the area of a triangle is half of the area of the parallelogram of the same height, or that it is the same as the area of a parallelogram that is half its height. They build this intuition in several ways:

- by recalling that two copies of a triangle can be composed into a parallelogram;
- by recognizing that a triangle can be recomposed into a parallelogram that is half the triangle's height; or
- by reasoning indirectly, using one or more rectangles with the same height as the triangle.

They apply this insight to find the area of triangles both on and off the grid.

Learning Objectives:

- Draw a diagram to show that the area of a triangle is half the area of an associated parallelogram.
- Explain (orally and in writing) strategies for using the base and height of an associated parallelogram to determine the area of a triangle.

Review Mini Lesson: Decomposing a Parallelogram Playlist

Content Standards: ***Addressing:*** **CC.6.G.1** Find the area of right triangles, other triangles, special quadrilaterals, and polygons by composing into rectangles or decomposing into triangles and other shapes; apply these techniques in the context of solving real-world and mathematical problems.	**Vocabulary:** No new terms **Cool Down:** (English) and (Spanish)
Lesson 9: Formula for the Area of a Triangle TFG and Playlist In this lesson students begin to reason about area of triangles more methodically: by generalizing their observations up to this point and expressing the area of a triangle in terms of its base and height. Students first learn about bases and heights in a triangle by studying examples and counterexamples. They then identify base-height measurements of triangles, use them to determine area, and look for a pattern in their reasoning to help them write a general formula for finding area. **Learning Objectives:** ● Compare, contrast, and critique (orally) different strategies for determining the area of a triangle. ● Generalize a process for finding the area of a triangle, and justify (orally and in writing) why this can be abstracted as 12 • b • h. ● Recognize that any side of a triangle can be considered its base, choose a side to use as the base when calculating the area of a triangle, and identify the corresponding height.	
Content Standards: ***Addressing:*** **CC.6.EE.2.a** Write expressions that record operations with numbers and with letters standing for numbers. For example, express the calculation "Subtract y from 5" as 5 – y. **CC.6.EE.2.c** Evaluate expressions at specific values of their variables. Include expressions that arise from formulas used in real-world problems. Perform arithmetic operations, including those involving whole-number exponents, in the conventional order when there are no parentheses to specify a particular order (Order of Operations). For example, use the formulas $V = s^3$ and $A = 6\ s^2$ to find the volume and surface area of a cube with sides of length s = 1/2.	**Vocabulary:** Opposite vertex **Cool Down:** (English) and (Spanish)

CC.6.G.1 Find the area of right triangles, other triangles, special quadrilaterals, and polygons by composing into rectangles or decomposing into triangles and other shapes; apply these techniques in the context of solving real-world and mathematical problems. ***Building Toward:*** **CC.6.G.1** Find the area of right triangles, other triangles, special quadrilaterals, and polygons by composing into rectangles or decomposing into triangles and other shapes; apply these techniques in the context of solving real-world and mathematical problems.	
Lesson 10: Bases and Heights of Triangles TFG and Playlist This lesson furthers students' ability to identify and work with a base and height in a triangle in two ways: 1. By learning to draw (not just to recognize) a segment to show the corresponding height for any given base, and 2. By learning to choose appropriate base-height pairs to enable area calculations. Students have seen that the area of a triangle can be determined in multiple ways. Using the base and height measurements and the formula is a handy approach, but because there are three possible pairs of bases and heights, some care is needed in identifying the right combination of measurements. Some base-height pairs may be more practical or efficient to use than others, so it helps to be strategic in choosing a side to use as a base. **Learning Objectives:** • Draw and label the height that corresponds to a given base of a triangle, making sure it is perpendicular to the base and the correct length. • Evaluate (orally) the usefulness of different base-height pairs for finding the area of a given triangle. **Review Mini Lesson: Some Bases are Better than Others Playlist** **Review Mini Lesson: Area Game Playlist**	
Content Standards: ***Addressing:*** **CC.6.EE.2.c** Evaluate expressions at specific values of their variables. Include expressions that arise from formulas used in real-world problems. Perform arithmetic operations, including those involving whole-number exponents, in the conventional order when there are no parentheses to specify a	**Vocabulary:** No new terms **Cool Down:**

particular order (Order of Operations). For example, use the formulas $V = s^3$ and $A = 6\ s^2$ to find the volume and surface area of a cube with sides of length $s = 1/2$. **CC.6.G.1** Find the area of right triangles, other triangles, special quadrilaterals, and polygons by composing into rectangles or decomposing into triangles and other shapes; apply these techniques in the context of solving real-world and mathematical problems.	(English) and (Spanish)

Section 4: Polygons

Lesson 11: Polygons TFG and Playlist

Students have worked with polygons in earlier grades and throughout this unit. In this lesson, students write a definition that characterizes polygons. There are many different accurate definitions for a polygon. The goal of this lesson is not to find the most succinct definition possible, but to articulate the defining characteristics of a polygon in a way that makes sense to students.

Another key takeaway for this lesson is that the area of any polygon can be found by decomposing it into triangles.

Learning Objectives:

- Compare and contrast (orally) different strategies for finding the area of a polygon.
- Describe (orally and in writing) the defining characteristics of polygons.
- Find the area of a polygon, by decomposing it into rectangles and triangles, and present the solution method (using words and other representations).

Content Standards: ***Building On:*** **CC.4.G.2** Classify two-dimensional figures based on the presence or absence of parallel or perpendicular lines, or the presence or absence of angles of a specified size. Recognize right triangles as a category, and identify right triangles. **CC.5.G** Classify two-dimensional figures into categories based on their properties.	**Vocabulary:** Edge Polygon Quadrilateral Vertex **Cool Down:**

Addressing: **CC.6.G.1** Find the area of right triangles, other triangles, special quadrilaterals, and polygons by composing into rectangles or decomposing into triangles and other shapes; apply these techniques in the context of solving real-world and mathematical problems. ***Building Toward:*** **CC.6.G.1** Find the area of right triangles, other triangles, special quadrilaterals, and polygons by composing into rectangles or decomposing into triangles and other shapes; apply these techniques in the context of solving real-world and mathematical problems.	(English) and (Spanish)

Section 5: Surface Area

Lesson 12: What is Surface Area? TFG and Playlist

This lesson introduces students to the concept of surface area. They use what they learned about the area of rectangles to find the surface area of prisms with rectangular faces.

Students begin exploring surface area in concrete terms, by estimating and then calculating the number of square sticky notes it would take to cover a filing cabinet. The first activity is meant to be open and exploratory. In the second activity, they then learn that the surface area (in square units) is the number of unit squares it takes to cover all the surfaces of a three-dimensional figure without gaps or overlaps .
Later in the lesson, students use cubes to build rectangular prisms and then determine their surface areas.

Learning Objectives:

- Calculate the surface area of a rectangular prism and explain (orally and in writing) the solution method.
- Comprehend that the term “surface area” (in written and spoken language) refers to how many square units it takes to cover all the faces of a three-dimensional object.

Content Standards: ***Addressing:*** **CC.6.G.4** Represent three-dimensional figures using nets made up of rectangles and triangles, and use the nets to find the surface area of these figures. Apply these techniques in the context of solving real-world and mathematical problems. ***Building Toward:*** **CC.6.G.4** Represent three-dimensional figures using nets made up of rectangles and triangles, and use the nets to find the surface area of these figures. Apply these techniques in the context of solving real-world and mathematical problems.	**Vocabulary:** Face Surface area **Cool Down:** (English) and (Spanish)
Lesson 13: Polyhedra TFG and Playlist In this lesson, students learn about polyhedra and their nets. They also study prisms and pyramids as types of polyhedra with certain defining features. Polyhedra can be thought of as the three-dimensional analog of polygons. Students identify attributes of polyhedra; however, they do not need to memorize a formal definition of a polyhedron. This work will help them make sense of nets and surface area. **Learning Objectives:** ● Compare and contrast (orally and in writing) features of prisms and pyramids. ● Comprehend and use the words “face”, “edge”, “vertex”, and “base” to describe polyhedra (in spoken and written language). ● Understand that the word “net” refers to a two-dimensional figure that can be assembled into a polyhedron, and create a net for a given polyhedron. **Review Mini Lesson: Assembling Polyhedra Playlist**	
Content Standards: ***Addressing:*****CC.6.G.4** Represent three-dimensional figures using nets made up of rectangles and triangles, and use the nets to find the surface area of these figures. Apply these techniques in the context of solving real-world and mathematical problems.	**Vocabulary:** Base Face Net Polyhedron Prism Pyramid

Building Toward: **CC.6.G.4** Represent three-dimensional figures using nets made up of rectangles and triangles, and use the nets to find the surface area of these figures. Apply these techniques in the context of solving real-world and mathematical problems.	**Cool Down:** (English) and (Spanish)
Lesson 14: Nets and Surface Area TFG and Playlist Previously, students learned about polyhedra, analyzed and defined their features, and investigated their physical representations. Students also identified the polygons that compose a polyhedron; they recognized a net as an arrangement of these polygons and as a two-dimensional representation of a three-dimensional figure. This lesson extends students' understanding of polyhedra and their nets. They practice visualizing the polyhedra that could be assembled from given nets and use nets to find the **surface area** of polyhedra. **Learning Objectives:** ● Match polyhedra with their nets and justify (orally) that they match. ● Use a net with gridlines to calculate the surface area of a prism or pyramid and explain (in writing) the solution method. ● Visualize and identify the polyhedron that can be assembled from a given net.	
Content Standards: ***Addressing:*** **CC.6.G.4** Represent three-dimensional figures using nets made up of rectangles and triangles, and use the nets to find the surface area of these figures. Apply these techniques in the context of solving real-world and mathematical problems.	**Vocabulary:** No new terms **Cool Down:** (English) and (Spanish)
Lesson 15: More Nets, More Surface Area TFG and Playlist This lesson further develops students' ability to visualize the relationship between nets and polyhedra and their capacity to reason about surface area. Previously, students started with nets and visualized the polyhedra that could be assembled from the nets. Here they go in the other direction—from polyhedra to nets. They practice mentally unfolding three-dimensional shapes, drawing two-dimensional nets, and	

using them to calculate surface area. Students also have a chance to compare and contrast surface area and volume as measures of two distinct attributes of a three-dimensional figure.

Learning Objectives:

- Draw and assemble a net for the prism or pyramid shown in a given drawing.
- Interpret (using words and other representations) two-dimensional representations of prisms and pyramids.
- Use a net without gridlines to calculate the surface area of a prism or pyramid and explain (in writing) the solution method.

Review Mini Lesson: Comparing Boxes Playlist
Challenge Mini Lesson: Comparing Boxes Playlist

Content Standards:
Building On: **CC.5.MD.5:** Relate volume to the operations of multiplication and addition and solve real world and mathematical problems involving volume.
Addressing: **CC.6.G.2:** Find the volume of a right rectangular prism with fractional edge lengths by packing it with unit cubes of the appropriate unit fraction edge lengths, and show that the volume is the same as would be found by multiplying the edge lengths of the prism. Apply the formulas V = l w h and V = b h to find volumes of right rectangular prisms with fractional edge lengths in the context of solving real-world and mathematical problems.

Vocabulary:
No new terms

Cool Down:
(English) and (Spanish)

Lesson 16: Distinguishing Between Surface Area and Volume TFG and Playlist
In this optional lesson, students distinguish among measures of one-, two-, and three-dimensional attributes and take a closer look at the distinction between surface area and volume (building on students' work in earlier grades). Use this lesson to reinforce the idea that length is a one-dimensional attribute of geometric figures, surface area is a two-dimensional attribute, and volume is a three-dimensional attribute.

By building polyhedra, drawing representations of them, and calculating both surface area and volume, students see that different three-dimensional figures can have the same volume but different surface areas, and vice versa. This is analogous to the fact that

two-dimensional figures can have the same area but different perimeters, and vice versa. Students must attend to units of measure throughout the lesson.

Learning Objectives:

- Comprehend that surface area and volume are two different attributes of three-dimensional objects and are measured in different units.
- Describe (orally and in writing) shapes built out of cubes, including observations about their surface area and volume.
- Determine the surface area and volume of shapes made out of cubes.

Challenge Mini Lesson: Comparing Prisms without Building Them Playlist

Content Standards:
Building On: **CC.3.MD.5:** Recognize area as an attribute of plane figures and understand concepts of area measurement.
CC.4.MD.1: Know relative sizes of measurement units within one system of units including km, m, cm; kg, g; lb, oz.; l, ml; hr, min, sec. Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a two-column table. For example, know that 1 ft is 12 times as long as 1 in. Express the length of a 4 ft snake as 48 in. Generate a conversion table for feet and inches listing the number pairs (1, 12), (2, 24), (3, 36), ...
CC.5.MD: Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition.
CC.5.MD.3.b: A solid figure which can be packed without gaps or overlaps using n unit cubes is said to have a volume of n cubic units.
CC.5.MD.4: Measure volumes by counting unit cubes, using cubic cm, cubic in, cubic ft, and improvised units.
CC.5.MD.5.a: Find the volume of a right rectangular prism with whole-number side lengths by packing it with unit cubes, and show that the volume is the same as would be found by multiplying the edge lengths,

Vocabulary:
No new terms

Cool Down:
(English) and (Spanish)

equivalently by multiplying the height by the area of the base. Represent threefold whole-number products as volumes, e.g., to represent the associative property of multiplication. ***Addressing:*** **CC.6.G.4:** Represent three-dimensional figures using nets made up of rectangles and triangles, and use the nets to find the surface area of these figures. Apply these techniques in the context of solving real-world and mathematical problems.	

Section 6: Squares and Cubes

Lesson 17: Squares and Cubes TFG and Playlist

In this lesson, students learn about perfect squares and perfect cubes. They see that these names come from the areas of squares and the volumes of cubes with whole-number side lengths. Students find unknown side lengths of a square given the area or unknown edge lengths of a cube given the volume.

Students also use **exponents** of 2 and 3 and see that in this geometric context, exponents help to efficiently express multiplication of the side lengths of **squares** and **cubes.** Students learn that expressions with exponents of 2 and 3 are called squares and cubes, and see the geometric motivation for this terminology. (The term “exponent” is deliberately not defined more generally at this time. Students will work with exponents in more depth in a later unit.)

Learning Objectives:

- Generalize a process for finding the volume of a cube, and justify (orally) why this can be abstracted as s^3.
- Include appropriate units (orally and in writing) when reporting lengths, areas, and volumes, e.g. cm, cm^2, cm^3.
- Interpret and write expressions with exponents ^{2} and ^{3} to represent the area of a square or the volume of a cube.

Content Standards: ***Building On:*** **CC.4.MD.3:** Apply the area and perimeter formulas for rectangles in real world and mathematical problems. For example, find the width of a rectangular room given the area of the flooring and the length, by viewing the area formula as a multiplication equation with an unknown factor. **CC.5.MD.5.a:** Find the volume of a right rectangular prism with whole-number side lengths by packing it with unit cubes, and show that the volume is the same as would be found by multiplying the edge lengths, equivalently by multiplying the height by the area of the base. Represent threefold whole-number products as volumes, e.g., to represent the associative property of multiplication. ***Addressing:*** **CC.6.EE:** Apply and extend previous understandings of arithmetic to algebraic expressions. **CC.6.EE.1:** Write and evaluate numerical expressions involving whole-number exponents. ***Building Toward:*** **CC.6.EE.1:** Write and evaluate numerical expressions involving whole-number exponents.	**Vocabulary:** Cubed Exponent Squared **Cool Down:** (English) and (Spanish)
Lesson 18: Surface Area of a Cube TFG and Playlist In this lesson, students practice using exponents of 2 and 3 to express products and to write square and cubic units. They also look for and express regularity in repeated reasoning (MP8) to write the formula for the surface area of a cube. Students will continue this work later in the course, in the unit on expressions and equations. **Learning Objectives:** ● Generalize a process for finding the surface area of a cube, and justify (orally) why this can be abstracted as $6 \cdot s^2$. ● Interpret (orally) expressions that include repeated addition, multiplication, repeated multiplication, or exponents. ● Write expressions, with or without exponents, to represent the surface area of a given cube. **Review Mini Lesson: Surface Area Nets Playlist**	
Content Standards: ***Addressing:*** **CC.6.EE.1:** Write and evaluate numerical expressions involving whole-number	**Vocabulary:** No new terms

exponents. **CC.6.EE.2.a**: Write expressions that record operations with numbers and with letters standing for numbers. For example, express the calculation “Subtract y from 5” as 5 – y. **CC.6.G.4:** Represent three-dimensional figures using nets made up of rectangles and triangles, and use the nets to find the surface area of these figures. Apply these techniques in the context of solving real-world and mathematical problems.	**Cool Down:** (English) and (Spanish)

Section 7: Let’s Put it to Work

Lesson 19: Designing a Tent TFG and Playlist

In this culminating lesson, students use what they learned in this unit to design a tent and determine how much fabric is needed for the tent. The task prompts students to model a situation with the mathematics they know, make assumptions, and plan a path to solve a problem.

The lesson has two parts. In the first part, students learn about the task, gather information, and begin designing. The introduction is important to ensure all students understand the context. Then, after answering some preparatory questions in groups and as a class, students work individually to design and draw their tents. They use their knowledge of area and surface area to calculate and justify an estimate of the amount of fabric needed for their design.

The second part involves reflection and discussion of students’ work. Students explain their work to a partner or small group, discuss and compare their designs, and consider the impact of design decisions on the surface areas of their tents.

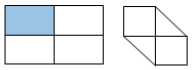
Learning Objectives:

- Apply understanding of surface area to estimate the amount of fabric in a tent, and explain (orally and in writing) the estimation strategy.
- Compare and contrast (orally) different tent designs.
- Interpret information (presented in writing and through other representations) about tents and sleeping bags.

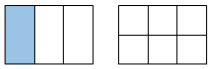
Content Standards:	Vocabulary:
Addressing: **CC.6.G.1:** Find the area of right triangles, other triangles, special quadrilaterals, and polygons by composing into rectangles or decomposing into triangles and other shapes; apply these techniques in the context of solving real-world and mathematical problems. **CC.6.G.4:** Represent three-dimensional figures using nets made up of rectangles and triangles, and use the nets to find the surface area of these figures. Apply these techniques in the context of solving real-world and mathematical problems.	No new terms **Cool Down:** (English) and (Spanish)

Explanation of Content:

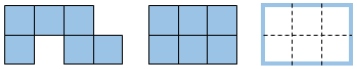
Work with area in grade 6 draws on earlier work with geometry and geometric measurement. Students began to learn about two- and three-dimensional shapes in kindergarten, and continued this work in grades 1 and 2, composing, decomposing, and identifying shapes. Students' work with geometric measurement began with length and continued with area. Students learned to "structure two-dimensional space," that is, to see a rectangle with whole-number side lengths as composed of an array of unit squares or composed of iterated rows or iterated columns of unit squares. In grade 3, students distinguished between perimeter and area. They connected rectangle area with multiplication, understanding why (for whole-number side lengths) multiplying the side lengths of a rectangle yields the number of unit squares that tile the rectangle. They used area diagrams to represent instances of the distributive property. In grade 4, students applied area and perimeter formulas for rectangles to solve real-world and mathematical problems, and learned to use protractors. In grade 5, students extended the formula for the area of rectangles to rectangles with fractional side lengths.

Grade 1 

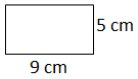
Partition rectangles and circles into halves and quarters. Compose figures in the plane.

Grade 2 

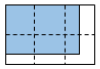
Partition rectangles and circles into thirds. Partition rectangles into squares and count them.

Grade 3 

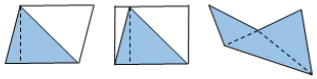
Find whole-number areas. Multiply to find areas of rectangles. Distinguish between perimeter and area.

Grade 4 

Apply area and perimeter formulas for rectangles in real-world contexts.

Grade 5 

Tile to find areas of rectangles with fractional side-lengths. Multiply to find these areas.

Grade 6 

Understand the area of a triangle is half of the product of one of its side-lengths and its corresponding height. Find areas of polygons.

In grade 6, students extend their reasoning about area to include shapes that are not composed of rectangles. Doing this draws on abilities developed in earlier grades to compose and decompose shapes, for example, to see a rectangle as composed of two congruent right triangles. Through activities designed and sequenced to allow students to make sense of problems and persevere in solving them (MP1), students build on these abilities and their knowledge of areas of rectangles to find the areas of polygons by decomposing and rearranging them to make figures whose areas they can determine (MP7). They learn strategies for finding areas of parallelograms and triangles, and use regularity in repeated reasoning (MP8) to develop formulas for these areas, using geometric properties to justify the correctness of these formulas. They use these formulas to solve problems. They understand that any polygon can be decomposed into triangles, and use this knowledge to find areas of polygons. Students find the surface areas of polyhedra with triangular and rectangular surfaces. They study, assemble, and draw nets for polyhedra and use nets to determine surface areas. Throughout, they discuss their mathematical ideas and respond to the ideas of others (MP3, MP6).

Because grade 6 students will be writing algebraic expressions and equations involving the letter x and x is easily confused with $\times$, these materials use the "dot" notation, e.g., $2 \cdot 3$, for multiplication instead of "cross" notation, e.g., 2×3. The dot notation will be new for many students, and they will need explicit guidance in using it.

Many of the lessons in this unit ask students to work on geometric figures that are not set in a real-world context. This design choice respects the significant intellectual work of reasoning about area. Tasks set in real-world contexts that involve areas of polygons are often contrived and hinder rather than help understanding. Moreover, mathematical contexts are legitimate contexts that are worthy of study. Students do have an opportunity at the end of the unit to tackle a real-world application (MP2, MP4).

In grade 6, students are likely to need physical tools in order to check that one figure is an identical copy of another where "identical copy" is defined as follows:
One figure is an identical copy of another if one can be placed on top of the other so that they match up exactly.

In grade 8, students will understand "identical copy of" as "congruent to" and understand congruence in terms of rigid motions, that is, motions such as reflection, rotation, and translation. In grade 6, students do not have any way to check for congruence except by inspection, but it is not practical to cut out and stack every pair of figures one sees. Tracing paper is an excellent tool for verifying that figures "match up exactly," and students should have access to this and other tools at all times in this unit. Thus, each lesson plan suggests that each student should have access to a geometry toolkit, which contains tracing paper, graph paper, colored pencils, scissors, and an index card to use as a straightedge or to mark right angles. Providing students with these toolkits gives opportunities for students to develop abilities to select appropriate tools and use them strategically to solve problems (MP5). Note that even students in a digitally enhanced classroom should have access to such tools; apps and simulations should be considered additions to their toolkits, not replacements for physical tools. In this grade, all figures are drawn and labeled so that figures that look congruent actually are congruent; in later grades when students have the tools to reason about geometric figures more precisely, they will need to learn that visual inspection is not sufficient for determining congruence. Also note that all arguments laid out in this unit can (and should) be made more precise in later grades, as students' geometric understanding deepens.

Universal Design for Learning (UDL)

The Skyline curriculum uses the Universal Design for Learning (UDL) framework, which guides the design of learning environments to ensure they are accessible and challenging for all. The UDL guidelines provide suggestions on how to support students through multiple means of engagement, representation, and action and expression. The tables below highlight UDL differentiation resources that are available for this unit.

Course Differentiation Resources

Self Regulation	Sustaining Effort & Persistence	Recruiting Interest
• Growth Mindset in Math • SEL Check-In (English)(Spanish)	• Classroom Community Anchor Chart • Goal Setting (English)(Spanish) • Group Roles (English)(Spanish)	• Student Survey (English)(Spanish) • Anchor Chart Activity
Comprehension	**Language & Symbols**	**Perception**
• Frayer Model Template (English)(Spanish) • Fluency Games	• EL Development Resource (English)(Spanish) • Word Wall *Coming soon!*	• Math Cognate Table
Physical Action	**Executive Functions**	**Expression & Communication**
• Accessibility with Safari	• Student Standards Tracker (English)(Spanish) • Learning Objectives/Target Tracker (English)(Spanish) • Self-Monitoring Reflection Checklist (English)(Spanish) • Math Language Routines • Student Discourse Rubrics (English)(Spanish) • Assessment Reflection (English)(Spanish)	• GeoGebra • Desmos • Three Reads Classroom Poster (English)(Spanish) • Sentence Starters Grades (English)(Spanish) • Conversation Cards (English)(Spanish)

Unit-Specific Differentiation Resources

Unit Level

	• Google Practice Sets *(Found in each TFG)!* *(Self Regulation)* • Choice Board *Coming soon!* (English)(Spanish) *(Recruiting Interest)* • EL Support Mini Lessons (Language & Symbols) • Glossary (Language & Symbols)		• E-Workbooks (English)(Spanish) (Perception) • Khan Academy: Plane Figures (Area) (Executive Function) • Khan Academy: 3DFigures (Surface Area) (Executive Function)
Lesson 2	• Review Mini Lesson (English)(Spanish) (Comprehension)	Lesson 8	• Review Mini Lesson (English)(Spanish) (Comprehension)
Lesson 10	• Review Mini Lesson (English)(Spanish) (Comprehension) • Review Mini Lesson (English)(Spanish) (Comprehension)	Lesson 11	• Review Mini Lesson (English)(Spanish) (Comprehension)
Lesson 13	• Review Mini Lesson (English)(Spanish) (Comprehension)	Lesson 15	• Review Mini Lesson (English)(Spanish) (Comprehension) • Challenge Mini Lesson (English)(Spanish) (Comprehension)
Lesson 16	• Challenge Mini Lesson (English)(Spanish) (Comprehension)	Lesson 18	• Review Mini Lesson (English)(Spanish) (Comprehension)

Accommodations For Students with an Individual Education Program (IEP) or 504 Plan:

For students with an Individualized Education Program or a 504 Plan, consult the individual document to plan and implement individual accommodations for this lesson.

In addition, the following accommodations are suggested in the lessons as noted:

- Provide manipulatives or images. (Lessons 1, 12, 13, 15, 16, 17)
- Pair students with their previously identified peer tutors. (Lessons 2, 3, 5, 6, 7, 8, 10, 11, 12, 13, 15, 16, 17, 18, 19)
- Chunk tasks into more manageable parts (e.g., presenting one question at a time), which will aid students who benefit from support with organizational skills in problem solving. (Lessons 2, 3, 6, 9, 17)
- Create a word web or graphic organizer. (Lesson 2)
- Create an anchor chart publicly displaying important definitions, rules, formulas or concepts for future reference. (Lessons 3, 4, 9, 11, 13, 17)
- Provide a t-chart for students to record what they notice and wonder prior to being expected to share these ideas with others. (Lessons 4, 5, 15)

- Provide an image to students who benefit from extra processing time to review prior to implementation of this activity. (Lesson 14)
- Provide enlarged version visuals. (Lessons 5, 8, 10, 11)
- Check in with individual students, as needed, to assess for comprehension during each step of the activity. (Lessons 5, 7, 17)
- Use color coding and annotations to highlight important concepts or connections between representations in a problem. (Lessons 5, 6)
- Assist students to see the connections between new problems and prior work. Students may benefit from a review of different representations to activate prior knowledge. (Lesson 8)
- Read all statements aloud. Students who both listen to and read the information will benefit from extra processing time. (Lessons 8, 18)
- Provide a task checklist. (Lesson 15)

🖨️Unit Materials

Technology Digital Applets are available in the following lessons. These are referenced in the Teacher Facilitation Guides for each lesson and can be accessed in the lesson playlists.
Lessons 1, 2, 4, 5, 6, 7, 10, 12, 13, 16, and 17.

Materials A Cool Down is available with lessons 1 – 18 to formatively assess the students. Additionally, lessons 2, 3, 7, 8, 11, 13, 14, 15, and 19 have Blackline Masters to use with activities. All student facing materials are also found in a student e-workbook (**English**) (**Spanish**)

Resources Students need access to a Geometry Toolkit throughout this unit. The Geometry Toolkit for Grade 6 includes tracing paper, graph paper, colored pencils, scissors, and an index card to use as a straightedge or to mark right angles.

Below are all of the materials that can be assigned via Google Classroom or printed for use.

Lesson 1	Lesson 2	Lesson 3
Student Task Statements Student Task Statements in Spanish Practice Problems Practice Problems in Spanish Cool Down Cool Down in Spanish	Student Task Statements Student Task Statements in Spanish Practice Problems Practice Problems in Spanish Cool Down Cool Down in Spanish Blackline Master Blackline Master in Spanish	Student Task Statements Student Task Statements in Spanish Practice Problems Practice Problems in Spanish Cool Down Cool Down in Spanish Blackline Master Blackline Master in Spanish
Lesson 4	**Lesson 5**	**Lesson 6**
Student Task Statements Student Task Statements in Spanish Practice Problems Practice Problems in Spanish Cool Down Cool Down in Spanish	Student Task Statements Student Task Statements in Spanish Practice Problems Practice Problems in Spanish Cool Down Cool Down in Spanish	Student Task Statements Student Task Statements in Spanish Practice Problems Practice Problems in Spanish Cool Down Cool Down in Spanish
Lesson 7	**Lesson 8**	**Lesson 9**
Student Task Statements Student Task Statements in Spanish Practice Problems Practice Problems in Spanish Cool Down Cool Down in Spanish Blackline Master Blackline Master is Spanish	Student Task Statements Student Task Statements in Spanish Practice Problems Practice Problems in Spanish Cool Down Cool Down in Spanish Blackline Master Blackline Master in Spanish	Student Task Statements Student Task Statements in Spanish Practice Problems Practice Problems in Spanish Cool Down Cool Down in Spanish
Lesson 10	**Lesson 11**	**Lesson 12**
Student Task Statements Student Task Statements in Spanish	Student Task Statements Student Task Statements in Spanish	Student Task Statements Student Task Statements in Spanish

Practice Problems Practice Problems in Spanish Cool Down Cool Down in Spanish	Practice Problems Practice Problems in Spanish Cool Down Cool Down in Spanish Blackline Master Blackline Master in Spanish	Practice Problems Practice Problems in Spanish Cool Down Cool Down in Spanish
Lesson 13	**Lesson 14**	**Lesson 15**
Student Task Statements Student Task Statements in Spanish Practice Problem Practice Problems in Spanish Cool Down Cool Down in Spanish Blackline Master Blackline Master in Spanish Blackline Master Blackline Master in Spanish	Student Task Statements Student Task Statements in Spanish Practice Problems Practice Problems in Spanish Cool Down Cool Down in Spanish Blackline Master Blackline Master in Spanish Blackline Master Blackline Master in Spanish	Student Task Statements Student Task Statements in Spanish Practice Problems Practice Problems in Spanish Cool Down Cool Down in Spanish Blackline Master Blackline Master in Spanish
Lesson 16	**Lesson 17**	**Lesson 18**
Student Task Statements Student Task Statements in Spanish Practice Problems Practice Problems in Spanish Cool Down Cool Down in Spanish	Student Task Statements Student Task Statements in Spanish Practice Problems Practice Problems in Spanish Cool Down Cool Down in Spanish	Student Task Statements Student Task Statements in Spanish Practice Problems Practice Problems in Spanish Cool Down Cool Down in Spanish
Lesson 19		
Student Task Statements Student Task Statements in Spanish Cool Down Cool Down in Spanish Blackline Master		

Blackline Master in Spanish		