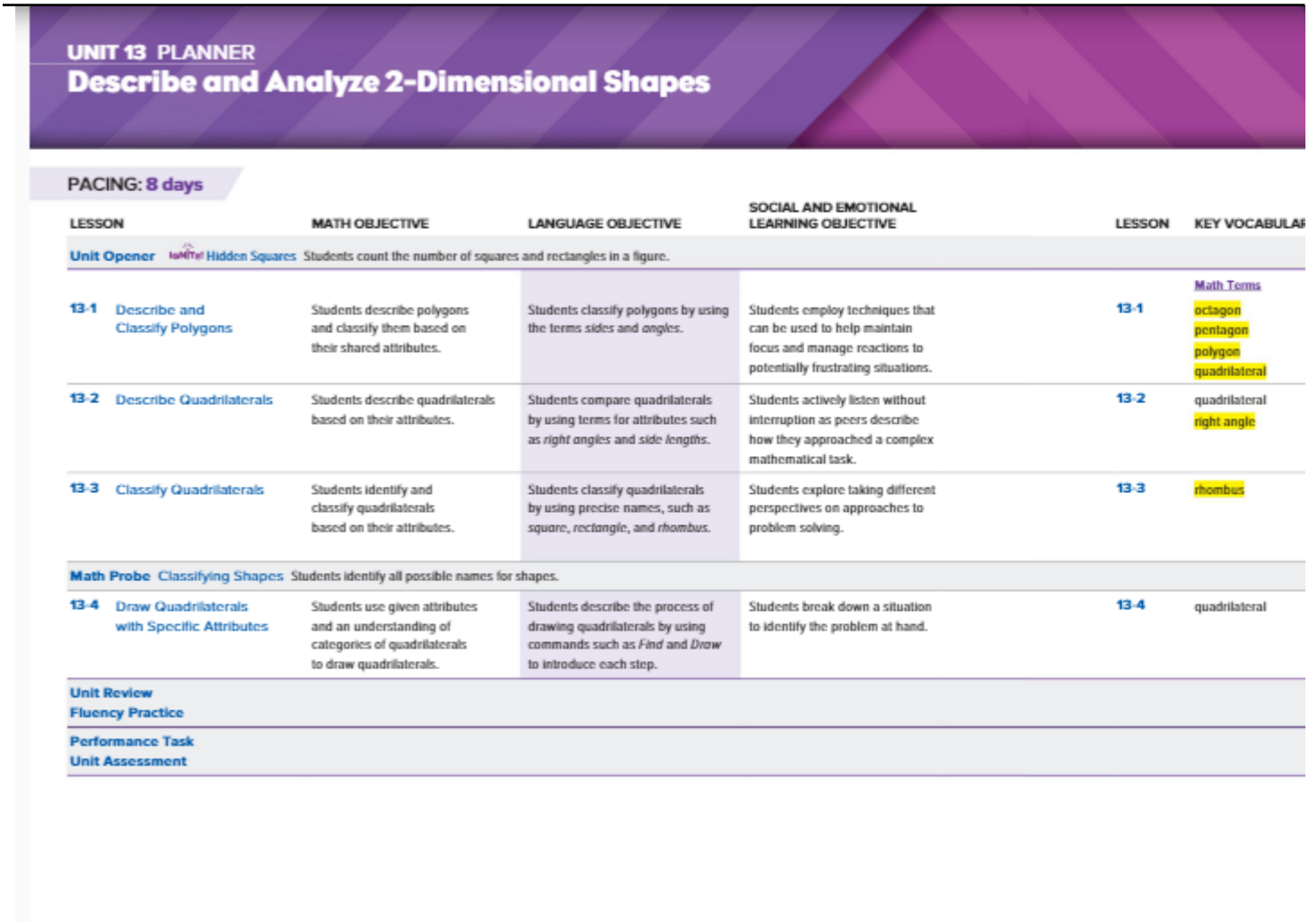
Unit 13 Reveal Grade 3

Content Area: **Math**
Course(s): **Language Arts, Art**
Time Period: **June**
Length: **2 weeks**
Status: **Published**

Unit Overview



UNIT 13 PLANNER

Describe and Analyze 2-Dimensional Shapes

PACING: 8 days

LESSON	MATH OBJECTIVE	LANGUAGE OBJECTIVE	SOCIAL AND EMOTIONAL LEARNING OBJECTIVE	LESSON	KEY VOCABULAR
Unit Opener Hidden Squares	Students count the number of squares and rectangles in a figure.				
13-1 Describe and Classify Polygons	Students describe polygons and classify them based on their shared attributes.	Students classify polygons by using the terms *sides* and *angles*.	Students employ techniques that can be used to help maintain focus and manage reactions to potentially frustrating situations.	13-1	Math Terms octagon pentagon polygon quadrilateral
13-2 Describe Quadrilaterals	Students describe quadrilaterals based on their attributes.	Students compare quadrilaterals by using terms for attributes such as *right angles* and *side lengths*.	Students actively listen without interruption as peers describe how they approached a complex mathematical task.	13-2	quadrilateral right angle
13-3 Classify Quadrilaterals	Students identify and classify quadrilaterals based on their attributes.	Students classify quadrilaterals by using precise names, such as *square*, *rectangle*, and *rhombus*.	Students explore taking different perspectives on approaches to problem solving.	13-3	rhombus
Math Probe Classifying Shapes	Students identify all possible names for shapes.				
13-4 Draw Quadrilaterals with Specific Attributes	Students use given attributes and an understanding of categories of quadrilaterals to draw quadrilaterals.	Students describe the process of drawing quadrilaterals by using commands such as *Find* and *Draw* to introduce each step.	Students break down a situation to identify the problem at hand.	13-4	quadrilateral
Unit Review Fluency Practice					
Performance Task Unit Assessment					

Enduring Understandings

See Above

Essential Questions

See Above

Instructional Strategies and Learning Activities

LESSON 13-1

Describe and Classify Polygons

Learning Targets

- I can describe and classify polygons.
- I can explain how to classify polygons.

Standards ◆ Major △ Supporting ○ Additional

Content

△ **3.G.A.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, and draw examples of quadrilaterals that do not belong to any of these subcategories.

Math Practices and Processes

MPP Look for and make use of structure.

Focus

Content Objective	Language Objectives	SEL Objective
• Students describe polygons and classify them based on their shared attributes.	• Students classify polygons by using the terms *sides* and *angles*. • To maximize linguistic and cognitive meta-awareness, use MLR2: Collect and Display.	• Students employ techniques that can be used to help maintain focus and manage reactions to potentially frustrating situations.

Coherence

Previous	Now	Next
• Students identified different shapes (Grade 2). • Students calculated the perimeter and area of different figures (Unit 11).	• Students classify polygons using different attributes.	• Students describe and classify quadrilaterals (Unit 13). • Students represent and identify points, lines, line segments, rays, angles, parallel lines, and perpendicular lines and realize they are attributes of different geometric figures (Grade 4).

Rigor

Conceptual Understanding	Procedural Skill & Fluency	Application
• Students build on their understanding of polygons and learn about the attributes of polygons.	• Students fluently name and classify polygons based on their attributes.	• Students classify and name real-world objects according to the number of sides and angles they have. *Application is not a targeted element of rigor for this standard.*

LESSON 13-2

Describe Quadrilaterals

Learning Targets

- I can describe quadrilaterals by their attributes.
- I can explain how to use attributes to describe quadrilaterals.

Standards ◇ Major △ Supporting ○ Additional

Content

△ **3.G.A.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, and draw examples of quadrilaterals that do not belong to any of these subcategories.

Math Practices and Processes

MPP Look for and make use of structure.

Focus

Content Objective	Language Objectives	SEL Objective
• Students describe quadrilaterals based on their attributes.	• Students compare quadrilaterals by using terms for attributes such as *right angles* and *side lengths*. • To optimize output, use MLR3: Critique, Correct, and Clarify.	• Students actively listen without interruption as peers describe how they approached a complex mathematical task.

Coherence

Previous	Now	Next
• Students identified different shapes (Grade 2). • Students identified triangles, quadrilaterals, pentagons, and hexagons (Unit 13).	• Students describe and compare the attributes of quadrilaterals.	• Students draw polygons with different attributes (Unit 13). • Students represent and identify points, lines, line segments, rays, angles, parallel lines, and perpendicular lines and realize they are attributes of different geometric figures (Grade 4).

Rigor

Conceptual Understanding	Procedural Skill & Fluency	Application
• Students build on their understanding of quadrilaterals to identify the different attributes of quadrilaterals.	• Students begin to identify quadrilaterals based on the number of sides, angles, and side lengths.	• Students apply their understanding of quadrilaterals to solve real-world problems. *Application is not a targeted element of rigor for this standard.*

LESSON 13-3

Classify Quadrilaterals

Learning Targets

- I can classify quadrilaterals by their attributes.
- I can explain how to classify quadrilaterals by examining their attributes.

Standards ◆ Major △ Supporting ○ Additional

Content

△ **3.G.A.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, and draw examples of quadrilaterals that do not belong to any of these subcategories.

Math Practices and Processes

MPP Construct viable arguments and critique the reasoning of others.

Focus

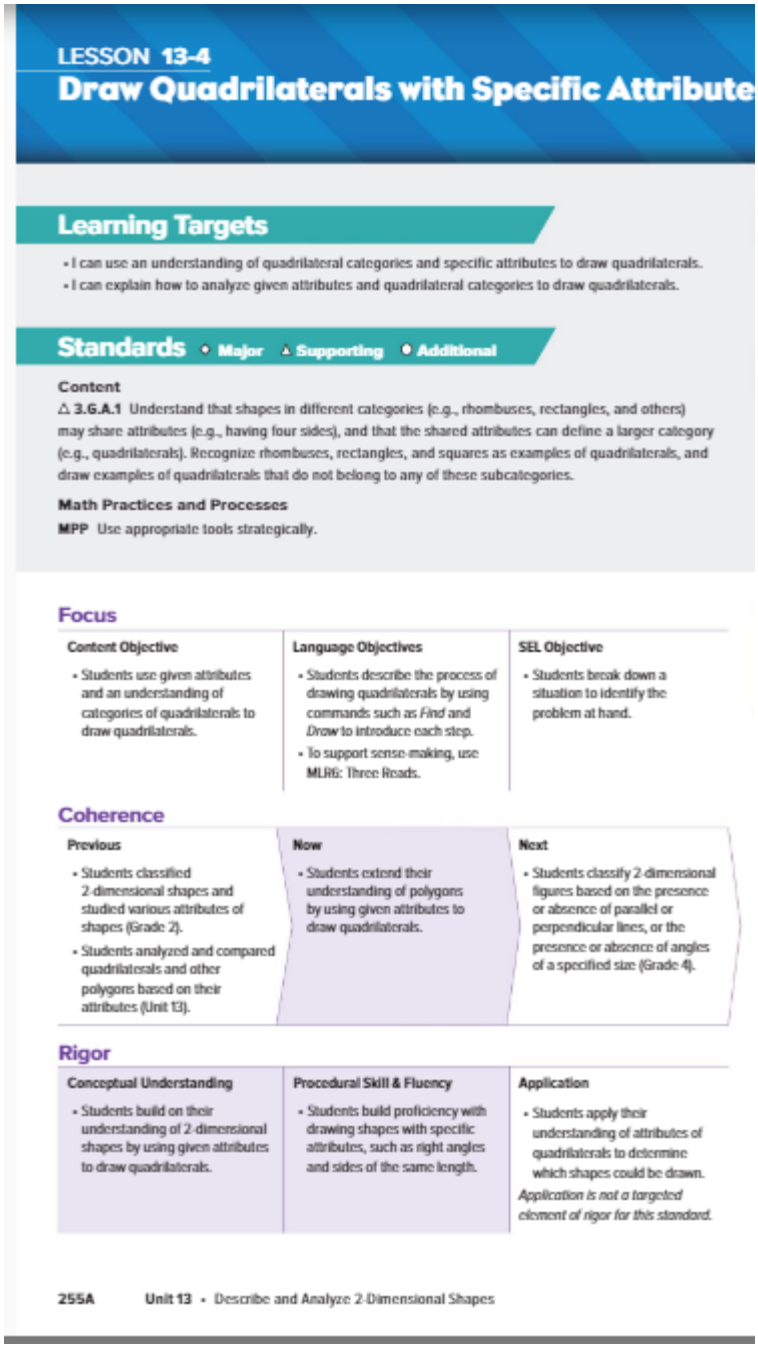
Content Objective	Language Objectives	SEL Objective
• Students identify and classify quadrilaterals based on their attributes.	• Students classify quadrilaterals by using precise names, such as *square*, *rectangle*, and *rhombus*. • To cultivate conversation, use MLR8: Discussion Supports.	• Students explore taking different perspectives on approaches to problem solving.

Coherence

Previous	Now	Next
• Students identified different shapes (Grade 2). • Students identified attributes of quadrilaterals (Unit 13).	• Students name and classify quadrilaterals based on their attributes.	• Students draw quadrilaterals that have different attributes (Unit 13). • Students represent and identify points, lines, line segments, rays, angles, parallel lines, and perpendicular lines and realize they are attributes of different geometric figures (Grade 4).

Rigor

Conceptual Understanding	Procedural Skill & Fluency	Application
• Students build on their understanding of attributes to name and classify quadrilaterals.	• Students name quadrilaterals with four sides, right angles, and equal side lengths.	• Students apply their understanding of quadrilaterals to solve real-world problems. *Application is not a targeted element of rigor for this standard.*



LESSON 13-4

Draw Quadrilaterals with Specific Attribute

Learning Targets

- I can use an understanding of quadrilateral categories and specific attributes to draw quadrilaterals.
- I can explain how to analyze given attributes and quadrilateral categories to draw quadrilaterals.

Standards ◆ Major ▲ Supporting ● Additional

Content

▲ **3.G.A.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, and draw examples of quadrilaterals that do not belong to any of these subcategories.

Math Practices and Processes

MPP Use appropriate tools strategically.

Focus

Content Objective

- Students use given attributes and an understanding of categories of quadrilaterals to draw quadrilaterals.

Language Objectives

- Students describe the process of drawing quadrilaterals by using commands such as *Find* and *Draw* to introduce each step.
- To support sense-making, use MLR6: Three Reads.

SEL Objective

- Students break down a situation to identify the problem at hand.

Coherence

Previous

- Students classified 2-dimensional shapes and studied various attributes of shapes (Grade 2).
- Students analyzed and compared quadrilaterals and other polygons based on their attributes (Unit 13).

Now

- Students extend their understanding of polygons by using given attributes to draw quadrilaterals.

Next

- Students classify 2-dimensional figures based on the presence or absence of parallel or perpendicular lines, or the presence or absence of angles of a specified size (Grade 4).

Rigor

Conceptual Understanding

- Students build on their understanding of 2-dimensional shapes by using given attributes to draw quadrilaterals.

Procedural Skill & Fluency

- Students build proficiency with drawing shapes with specific attributes, such as right angles and sides of the same length.

Application

- Students apply their understanding of attributes of quadrilaterals to determine which shapes could be drawn.

Application is not a targeted element of rigor for this standard.

255A Unit 13 • Describe and Analyze 2-Dimensional Shapes

Integration of Career Readiness, Life Literacies and Key Skills

PFL.9.1.2.CR.1	Recognize ways to volunteer in the classroom, school and community.
PFL.9.1.2.CR.2	List ways to give back, including making donations, volunteering, and starting a business.
PFL.9.1.2. FI.1	Differentiate the various forms of money and how they are used (e.g., coins, bills, checks, debit and credit cards).
PFL.9.1.2.FP.1	Explain how emotions influence whether a person spends or saves.
PFL.9.1.2.FP.3	Identify the factors that influence people to spend or save (e.g., commercials, family, culture, society).

PFL.9.1.2.PB.1	Determine various ways to save and places in the local community that help people save and accumulate money over time.
PFL.9.1.2.PB.2	Explain why an individual would choose to save money.
TECH.9.4.2.CI.1	Demonstrate openness to new ideas and perspectives (e.g., 1.1.2.CR1a, 2.1.2.EH.1, 6.1.2.CivicsCM.2).
TECH.9.4.2.CI.2	Demonstrate originality and inventiveness in work (e.g., 1.3A.2CR1a).
TECH.9.4.2.CT.2	Identify possible approaches and resources to execute a plan (e.g., 1.2.2.CR1b, 8.2.2.ED.3).
TECH.9.4.2.CT.3	Use a variety of types of thinking to solve problems (e.g., inductive, deductive).
TECH.9.4.2.DC.3	Explain how to be safe online and follow safe practices when using the internet (e.g., 8.1.2.NI.3, 8.1.2.NI.4).
TECH.9.4.2.DC.6	Identify respectful and responsible ways to communicate in digital environments.
TECH.9.4.2.DC.7	Describe actions peers can take to positively impact climate change (e.g., 6.3.2.CivicsPD.1).
TECH.9.4.2.TL.2	Create a document using a word processing application.
TECH.9.4.2.TL.5	Describe the difference between real and virtual experiences.
TECH.9.4.2.TL.6	Illustrate and communicate ideas and stories using multiple digital tools (e.g., SL.2.5.).
TECH.9.4.2.TL.7	Describe the benefits of collaborating with others to complete digital tasks or develop digital artifacts (e.g., W.2.6., 8.2.2.ED.2).

Technology and Design Integration

CS.K-2.8.1.2.AP.4	Break down a task into a sequence of steps.
CS.K-2.8.1.2.AP.5	Describe a program's sequence of events, goals, and expected outcomes.
CS.K-2.8.1.2.CS.1	Select and operate computing devices that perform a variety of tasks accurately and quickly based on user needs and preferences.
CS.K-2.8.1.2.DA.1	Collect and present data, including climate change data, in various visual formats.
CS.K-2.8.1.2.DA.3	Identify and describe patterns in data visualizations.
CS.K-2.8.1.2.DA.4	Make predictions based on data using charts or graphs.
CS.K-2.8.2.2.ITH.4	Identify how various tools reduce work and improve daily tasks.

Interdisciplinary Connections

LA.RI.3.1	Ask and answer questions, and make relevant connections to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers.
LA.RI.3.2	Determine the main idea of a text; recount the key details and explain how they support the main idea.
LA.RI.3.3	Describe the relationship between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text, using language that pertains to time, sequence, and cause/effect.
LA.RI.3.4	Determine the meaning of general academic and domain-specific words and phrases in a text relevant to a grade 3 topic or subject area.
LA.RI.3.5	Use text features and search tools (e.g., key words, sidebars, hyperlinks) to locate information relevant to a given topic efficiently.
LA.RI.3.6	Distinguish their own point of view from that of the author of a text.

LA.RI.3.8	Describe the logical connection between particular sentences and paragraphs in a text (e.g., comparison, cause/effect, first/second/third in a sequence) to support specific points the author makes in a text.
LA.RI.3.9	Compare, contrast and reflect on (e.g., practical knowledge, historical/cultural context, and background knowledge) the most important points and key details presented in two texts on the same topic.
LA.RI.3.10	By the end of the year, read and comprehend literary nonfiction at grade level text-complexity or above, with scaffolding as needed.
LA.W.3.4	With guidance and support from adults, produce writing in which the development and organization are appropriate to task and purpose. (Grade-specific expectations for writing types are defined in standards 1–3 above.)
LA.SL.3.1	Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher led) with diverse partners on grade 3 topics and texts, building on others' ideas and expressing their own clearly.
LA.L.3.1	Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.

Differentiation

- Understand that gifted students, just like all students, come to school to learn and be challenged.
- Pre-assess your students. Find out their areas of strength as well as those areas you may need to address before students move on.
- Consider grouping gifted students together for at least part of the school day.
- Plan for differentiation. Consider pre-assessments, extension activities, and compacting the curriculum.
- Use phrases like "You've shown you don't need more practice" or "You need more practice" instead of words like "qualify" or "eligible" when referring to extension work.
- Encourage high-ability students to take on challenges. Because they're often used to getting good grades, gifted students may be risk averse.

- **Definitions of Differentiation Components**:

    - Content – the specific information that is to be taught in the lesson/unit/course of instruction.
    - Process – how the student will acquire the content information.
    - Product – how the student will demonstrate understanding of the content.
    - Learning Environment – the environment where learning is taking place including physical location and/or student grouping

Differentiation occurring in this unit:

-

Modifications and Accommodations

Refer to QSAC EXCEL SMALL SPED ACCOMMOCATIONS spreadsheet in this discipline.

Modifications and Accommodations used in this unit:

Benchmark Assessments

Benchmark Assessments are given periodically (e.g., at the end of every quarter or as frequently as once per month) throughout a school year to establish baseline achievement data and measure progress toward a standard or set of academic standards and goals.

Schoolwide Benchmark assessments:

Aimsweb benchmarks 3X a year

Linkit Benchmarks 3X a year

DRA

Additional Benchmarks used in this unit:

Reveal Unit assessments

Formative Assessments

Assessment allows both instructor and student to monitor progress towards achieving learning objectives, and can be approached in a variety of ways. **Formative assessment** refers to tools that identify misconceptions, struggles, and learning gaps along the way and assess how to close those gaps. It includes effective tools for helping to shape learning, and can even bolster students' abilities to take ownership of their learning when they understand that the goal is to improve learning, not apply final marks (Trumbull and Lash, 2013). It can include students assessing themselves, peers, or even the instructor, through writing, quizzes, conversation, and more. In short, formative assessment occurs throughout a class or course, and seeks to improve student achievement of learning objectives through approaches that can support specific student needs (Theal and Franklin, 2010, p. 151).

Formative Assessments used in this unit:

Teacher observation

Checklists

Questioning and Discussion

Quizzes

Instructional Materials

See above

Summative Assessments

summative assessments evaluate student learning, knowledge, proficiency, or success at the conclusion of an instructional period, like a unit, course, or program. Summative assessments are almost always formally graded and often heavily weighted (though they do not need to be). Summative assessment can be used to great effect in conjunction and alignment with formative assessment, and instructors can consider a variety of ways to combine these approaches.

Summative assessments for this unit:

End of Unit assessments

Standards

MA.3.G.A	Reason with shapes and their attributes.
MA.3.G.A.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, and draw examples of quadrilaterals that do not belong to any of these subcategories.