Unit 14 Reveal Grade K

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

Unit Overview

UNIT 14 PLANNER
Compare Measurable Attributes

PACING: 9 days

LESSON		MATH OBJECTIVE	LANGUAGE OBJECTIVE	SOCIAL AND EMOTIONAL LEARNING OBJECTIVE	LESSON	KEY VOCABULARY
Unit Opener	How Big?	Students build cubes and discuss their measurable attributes.				
14-1	Describe Attributes of Objects	Students describe an object by measurable attributes, including length, height, weight, and capacity.	Students use adjectives to describe objects by measurable attributes such as length, height, weight, and capacity.	Students demonstrate thoughtful reflection through identifying the causes of challenges and successes while completing a mathematical task.	14-1	Math Terms capacity height length weight
14-2	Compare Lengths	Students compare the length of two objects by aligning the ends of the objects and determining which object is longer. Given drawings of two objects, students identify which object is longer.	Students use comparative adjectives to compare lengths of objects and drawings of objects.	Students recognize and work to understand the emotions of others and practice empathetic responses.	14-2	length long (longer) short (shorter)
14-3	Compare Heights	Students compare the height of two objects by aligning the ends of the objects and determining which object is taller. Given drawings of two objects, students identify which object is taller.	Students use comparative adjectives to compare heights of objects and drawings of objects.	Students collaborate with peers to complete a mathematical task and offer constructive feedback to the mathematical ideas posed by others.	14-3	height high (higher) short (shorter) tall (taller)
Math Probe	Comparing Objects	Students compare objects based on their measurable attributes.				
14-4	Compare Weights	Students compare the weight of two objects by placing them on a balance and determining which object is heavier. Given drawings of two objects on a balance, students identify which object is heavier.	Students use comparative adjectives to compare weights of objects and drawings of objects.	Students set learning goals and initiate work on tasks to accomplish their goals.	14-4	heavy (heavier) light (lighter) weighs less weighs more weight
14-5	Compare Capacities	Students compare the capacity of two objects by filling each with a set quantity of water/sand and determining which object holds more. Given drawings of two objects, students identify which has greater capacity.	Students use comparative adjectives to compare capacities of objects and drawings of objects.	Students identify personal traits that make them good students, peers, and math learners.	14-5	capacity empty full holds less holds more
Unit Review **Fluency Practice**						
Unit Assessment **Performance Task**						

Enduring Understandings

See Above

Essential Questions

See Above

Instructional Strategies and Learning Activities

LESSON 14-1

Describe Attributes of Objects

Learning Targets

- I can describe objects using length, height, weight, and capacity.
- I can explain different ways to describe the same object.

Standards ◆ Major ▲ Supporting ○ Additional

Content

○ **K.MD.A** Describe and compare measurable attributes.

○ **K.MD.A.1** Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object.

Math Practices and Processes

MPP Reason abstractly and quantitatively.

MPP Model with mathematics.

Focus

Content Objective	Language Objectives	SEL Objective
• Students describe an object by measurable attributes, including length, height, weight, and capacity.	• Students use adjectives to describe objects by measurable attributes such as length, height, weight, and capacity. • To support sense-making and to optimize output, ELs will participate in MLR8: Discussion Supports.	• Students demonstrate thoughtful reflection through identifying the causes of challenges and successes while completing a mathematical task.

Coherence

Previous	Now	Next
• Students identified three-dimensional shapes (Unit 11). • Students analyzed, compared, and composed shapes (Unit 13).	• Students describe objects using length, height, weight, and capacity. • Students explain different ways to describe the same object.	• Students compare lengths of shapes (Unit 14). • Students understand defining and non-defining attributes of shapes and solids (Grade 1).

Rigor

Conceptual Understanding	Procedural Skill & Fluency	Application
• Students understand that the length, height, weight, and capacity of objects can be described.	• Students begin to build proficiency in describing objects by length, height, weight, and capacity. *Procedural skill & fluency is not a targeted element of rigor for this standard.*	• Students apply their understanding of length, height, weight, and capacity to describe real-world objects. *Application is not a targeted element of rigor for this standard.*

LESSON 14-2

Compare Lengths

Learning Targets

- I can compare two objects by length.
- I can describe an object as longer or shorter than another object.

Standards ◆ Major ▲ Supporting ○ Additional

Content

○ **K.MD.A** Describe and compare measurable attributes.

○ **K.MD.A.2** Directly compare two objects with a measurable attribute in common, to see which object has "more of"/"less of" the attribute, and describe the difference.

Math Practices and Processes

MPP Construct viable arguments and critique the reasoning of others.

MPP Attend to precision.

Focus

Content Objectives	Language Objectives	SEL Objective
• Students compare the length of two objects by aligning the ends of the objects and determining which object is longer. • Given drawings of two objects, students identify which object is longer.	• Students use comparative adjectives to compare lengths of objects and drawings of objects. • To support to optimize output, ELs will participate in MLR7: Compare and Connect.	• Students recognize and work to understand the emotions of others and practice empathetic responses.

Coherence

Previous	Now	Next
• Students analyzed, compared, and composed shapes (Unit 13). • Students described objects using length, height, weight, and capacity (Unit 14).	• Students compare two objects by length. • Students describe an object as longer or shorter than another object.	• Students compare objects according to height (Unit 14). • Students understand defining and non-defining attributes of shapes and solids (Grade 1).

Rigor

Conceptual Understanding	Procedural Skill & Fluency	Application
• Students understand how to compare objects to see which is longer.	• Students build understanding of measurement by learning how to compare the length of objects. *Procedural skill & fluency is not a targeted element of rigor for this standard.*	• Students compare the length of two real-world objects. *Application is not a targeted element of rigor for this standard.*

LESSON 14-3

Compare Heights

Learning Targets

- I can compare two objects by height.
- I can describe an object as taller or shorter than another object.

Standards ◆ Major ▲ Supporting ○ Additional

Content

○ **K.MD.A** Describe and compare measurable attributes.

○ **K.MD.A.2** Directly compare two objects with a measurable attribute in common, to see which object has "more of"/"less of" the attribute, and describe the difference.

Math Practices and Processes

MPP Make sense of problems and persevere in solving them.

MPP Model with mathematics.

Focus

Content Objectives	Language Objectives	SEL Objective
• Students compare the height of two objects by aligning the ends of the objects and determining which object is taller. • Given drawings of two objects, students identify which object is taller.	• Students use comparative adjectives to compare heights of objects and drawings of objects. • To support to optimize output, ELs will participate MLR1: Stronger and Clearer Each Time.	• Students collaborate with peers to complete a mathematical task and offer constructive feedback to the mathematical ideas posed by others.

Coherence

Previous	Now	Next
• Students analyzed, compared, and composed shapes (Unit 13). • Students compared two objects by length (Unit 14).	• Students compare two objects by height. • Students describe an object as taller or shorter than another object.	• Students compare two objects by weight (Unit 14). • Students understand defining and non-defining attributes of shapes and solids (Grade 1).

Rigor

Conceptual Understanding	Procedural Skill & Fluency	Application
• Students understand how to compare objects to see which is taller.	• Students begin to build proficiency in measurement by learning how to compare the height of objects. *Procedural skill & fluency is not a targeted element of rigor for this standard.*	• Students compare heights of real-world objects. *Application is not a targeted element of rigor for this standard.*

LESSON 14-4

Compare Weights

Learning Targets

- I can compare two objects by weight.
- I can describe an object as heavier or lighter than another object.

Standards ◆ Major ▲ Supporting ● Additional

Content

○ **K.MD.A** Describe and compare measurable attributes.

○ **K.MD.A.2** Directly compare two objects with a measurable attribute in common, to see which object has "more of"/"less of" the attribute, and describe the difference.

Math Practices and Processes

MPP Reason abstractly and quantitatively.

MPP Model with mathematics.

Focus

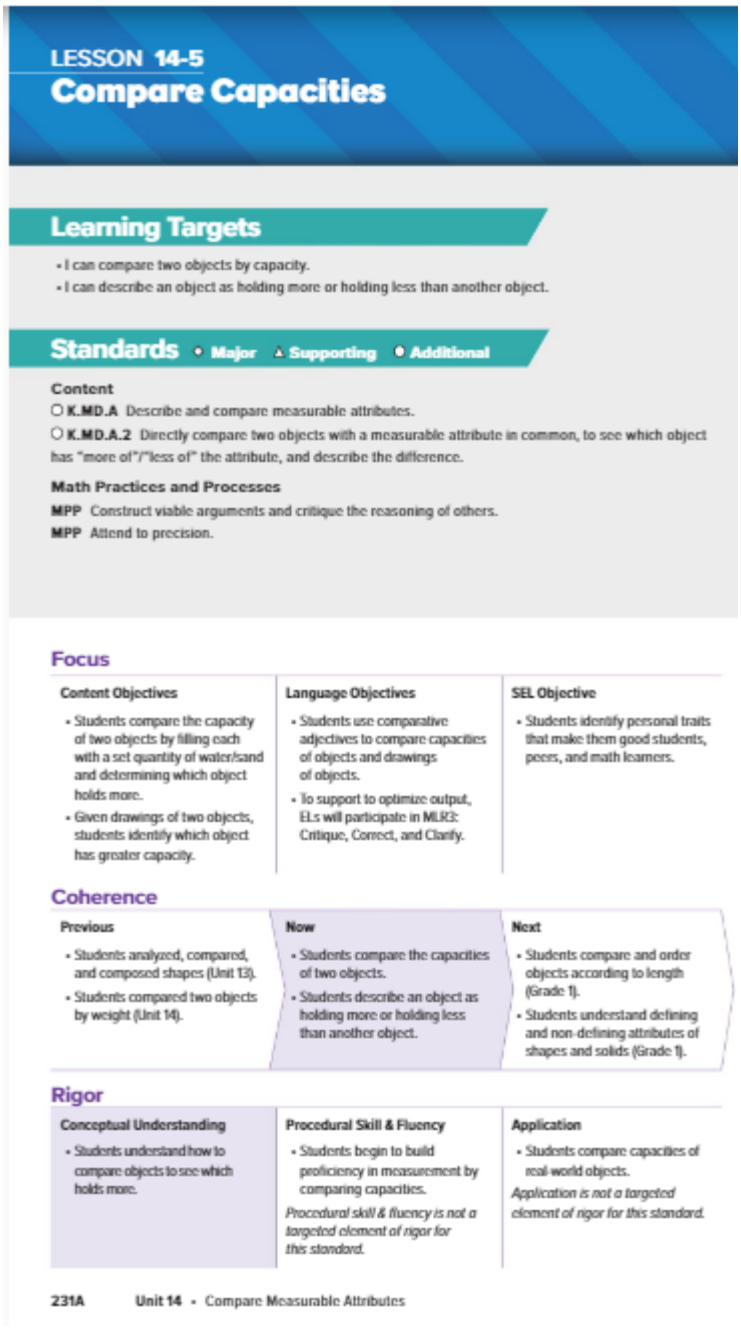
Content Objectives	Language Objectives	SEL Objective
• Students compare the weight of two objects by placing them on a balance and determining which object is heavier. • Given drawings of two objects on a balance, students identify which object is heavier.	• Students use comparative adjectives to compare weights of objects and drawings of objects. • To optimize output, ELs will participate in MLR4: Information Gap.	• Students set learning goals and initiate work on tasks to accomplish their goals.

Coherence

Previous	Now	Next
• Students analyzed, compared, and composed shapes (Unit 13). • Students compared two objects by height (Unit 14).	• Students compare two objects by weight. • Students describe an object as heavier or lighter than another object.	• Students compare two objects by capacity (Unit 14). • Students understand defining and non-defining attributes of shapes and solids (Grade 1).

Rigor

Conceptual Understanding	Procedural Skill & Fluency	Application
• Students understand how to compare objects to see which is heavier.	• Students begin to build proficiency in measurement by comparing the weight of objects. *Procedural skill & fluency is not a targeted element of rigor for this standard.*	• Students compare weights of real-world objects. *Application is not a targeted element of rigor for this standard.*



LESSON 14-5

Compare Capacities

Learning Targets

- I can compare two objects by capacity.
- I can describe an object as holding more or holding less than another object.

Standards ◆ Major ▲ Supporting ● Additional

Content

○ **K.MD.A** Describe and compare measurable attributes.

○ **K.MD.A.2** Directly compare two objects with a measurable attribute in common, to see which object has "more of"/"less of" the attribute, and describe the difference.

Math Practices and Processes

MPP Construct viable arguments and critique the reasoning of others.

MPP Attend to precision.

Focus

Content Objectives	Language Objectives	SEL Objective
• Students compare the capacity of two objects by filling each with a set quantity of water/sand and determining which object holds more. • Given drawings of two objects, students identify which object has greater capacity.	• Students use comparative adjectives to compare capacities of objects and drawings of objects. • To support to optimize output, ELs will participate in MLR3: Critique, Correct, and Clarify.	• Students identify personal traits that make them good students, peers, and math learners.

Coherence

Previous	Now	Next
• Students analyzed, compared, and composed shapes (Unit 13). • Students compared two objects by weight (Unit 14).	• Students compare the capacities of two objects. • Students describe an object as holding more or holding less than another object.	• Students compare and order objects according to length (Grade 1). • Students understand defining and non-defining attributes of shapes and solids (Grade 1).

Rigor

Conceptual Understanding	Procedural Skill & Fluency	Application
• Students understand how to compare objects to see which holds more.	• Students begin to build proficiency in measurement by comparing capacities. *Procedural skill & fluency is not a targeted element of rigor for this standard.*	• Students compare capacities of real-world objects. *Application is not a targeted element of rigor for this standard.*

231A Unit 14 • Compare Measurable Attributes

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.RL.K.4	Ask and answer questions about unknown words in a text.
LA.RI.K	Reading Informational Text
LA.RI.K.1	With prompting and support, ask and answer questions about key details in a text.
LA.RI.K.2	With prompting and support, identify the main topic and retell key details of a text.
LA.RI.K.3	With prompting and support, describe the connection between two individuals, events, ideas, or pieces of information in a text.
LA.RI.K.4	With prompting and support, ask and answer questions about unknown words in a text.
LA.RI.K.7	With prompting and support, describe the relationship between illustrations and the text in which they appear (e.g., what person, place, thing, or idea in the text an illustration depicts).
LA.RI.K.8	With prompting and support, identify the reasons an author gives to support points in a

	text.
LA.RI.K.10	Actively engage in group reading activities with purpose and understanding.
LA.W.K.5	With guidance and support from adults, strengthen writing through response and self-reflection using questions and suggestions from peers (e.g., adding details).
LA.SL.K	Speaking and Listening
LA.SL.K.1	Participate in collaborative conversations with diverse partners about kindergarten topics and texts with peers and adults in small and larger groups.
LA.SL.K.2	Confirm understanding of a text read aloud or information presented orally or through other media by asking and answering questions about key details and requesting clarification if something is not understood.
LA.SL.K.3	Ask and answer questions in order to seek help, get information, or clarify something that is not understood.

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

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

Instructional Materials

See above

Standards

MA.K.MD.A.1	Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object.
MA.K.MD.A.2	Directly compare two objects with a measurable attribute in common, to see which object has “more of”/“less of” the attribute, and describe the difference.