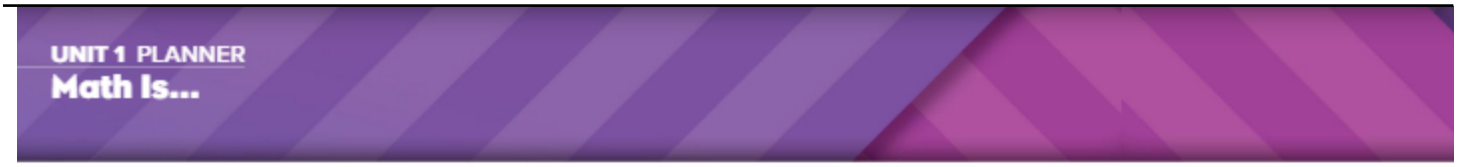
Unit 1 Reveal Grade K

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

Unit Overview



PACING: 10 days

LESSON		MATH OBJECTIVE	LANGUAGE OBJECTIVE	SOCIAL AND EMOTIONAL LEARNING OBJECTIVE	LESSON	KEY VOCABULARY
Unit Opener	IGNITE! Let's Sort	Explore different ways to sort objects				
1-1	Math Is Mine	Students explore their identities as doers of math.	Students express their identity as a doer of math by discussing math in daily life using present tense statements	Students describe their feelings and attitudes toward mathematics.	1-1	Math Terms hobby story strengths
1-2	Math Is Exploring and Thinking	Students explore what a problem is.	Students express and describe objects around them by using *there is/there are*.	Students recognize when they feel frustration during math class.	1-2	problem
1-3	Math Is In Our World	Students explore ways to show real-world problems with mathematics.	Students use adjectives to describe shapes they see in real-world situations.	Students recognize that classmates have different perspectives that are equally valid.	1-3	circle rectangle shape square triangle
1-4	Math Is Explaining and Sharing	Students explore ways to explain their thinking.	Students explain their thinking and respond to classmates by using the verb *think*.	Students practice showing respects for classmates as they share ideas and thinking.	1-4	cube cylinder diamond triangle
1-5	Math Is Finding Patterns	Students explore patterns.	Students use descriptive adjectives (colors, shapes) to describe a pattern.	Students practice self-control as they learn to take turns when sharing ideas with a partner or in a group.	1-5	pattern
1-6	Math Is Ours	Students think about the behaviors and mindsets that contribute to a productive learning environment.	Students use the present tense (*we count... we look at...*) to discuss the skills, behaviors, and mindsets that contribute to a productive learning environment.	Students discuss expectations for working productively with classmates.	1-6	pattern problem
Unit Review						
Fluency Practice						

Enduring Understandings

See Above

Essential Questions

See Above

Instructional Strategies and Learning Activities

LESSON 1-1
Math Is Mine

Learning Targets

- I can describe ways we use math in our lives and our world.
- I can tell my math story.

Standards ◆ Major △ Supporting ● Additional

Content

△ **K.CC.B.4B** Understand that the last number name said tells the number of objects counted.

△ **K.CC.B.5** Count to answer "how many?" questions about as many as 20 things arranged in a line, a rectangular array, or a circle, or as many as 10 things in a scattered configuration.

Math Practices and Processes

MPP Reason abstractly and quantitatively.

MPP Model with mathematics.

Focus

Content Objective	Language Objectives	SEL Objective
• Students explore their identities as doers of math.	• Students express their identity as a doer of math by discussing math in daily life using present tense statements. • To support sense-making, ELs will participate in MLR8: Discussion.	• Students describe their feelings and attitudes toward mathematics.

Coherence

Previous	Now	Next
• Students have been doers of math in their home life, as well as possibly more formally in school environments.	• Students think about their own and others' math stories. They recognize the role of math in our daily lives.	• Students will identify their and others' math superpowers.

Rigor

Conceptual Understanding	Procedural Skill & Fluency	Application
• Students understand that we each have our own math story.	• Students begin to develop effective communication skills.	• Students recognize themselves as doers of math with their own math stories.

LESSON 1-2
Math Is Exploring and Thinking

Learning Targets

- I can explain what a problem is.
- I can talk about numbers.

Standards ◆ Major △ Supporting ● Additional

Content

◇ **K.CC.B.4** Understand the relationship between numbers and quantities; connect counting to cardinality.

Math Practices and Processes

MPP Make sense of problems and persevere in solving them.

MPP Reason abstractly and quantitatively.

Focus

Content Objectives	Language Objectives	SEL Objective
• Students explore what a problem is. • Students think about ways to represent quantities.	• Students express and describe objects around them by using *there is/there are*. • To optimize output, ELs will participate in MLR1: Stronger and Clearer Each Time.	• Students recognize when they feel frustration during math class.

Coherence

Previous	Now	Next
• Students thought about what math is and what it means to do math.	• Students explore what a problem is and how math can help solve problems. Students explore ways to represent quantities.	• Students explore sharing their ideas about math.

Rigor

Conceptual Understanding	Procedural Skill & Fluency	Application
• Students understand that a problem is a question to answer and that math can often help to answer the question.	• Students begin to develop proficiency with problem solving, the first step being understanding what a problem is.	• Students apply their understanding of what a problem is as they identify problems to solve.

LESSON 1-3

Math Is In My World

Learning Target

- I can show a real-world situation using mathematics.

Standards ◇ Major △ Supporting ○ Additional

Content

◇ **K.G.A.1** Describe objects in the environment using names of shapes and describe the relative position of these objects using terms such as *above*, *below*, *beside*, *in front of*, *behind*, and *next to*.

Math Practices and Processes

MPP Model with Mathematics.

MPP Use appropriate tools strategically.

Focus

Content Objective	Language Objectives	SEL Objective
• Students explore ways to show real-world problems with mathematics.	• Students use adjectives to describe shapes they see in real-world models. • To optimize output, ELs will participate in MLR3: Critique, Correct and Clarify.	• Students recognize that classmates have different perspectives that are equally valid.

Coherence

Previous	Now	Next
• Students explored what a problem is and how quantities can be represented.	• Students explore ways to show a real-world problem using mathematics.	• Students explore ways to explain their thinking about mathematics.

Rigor

Conceptual Understanding	Procedural Skill & Fluency	Application
• Students understand that mathematics can be used to represent a real-world problem.	• Students begin to develop proficiency with problem solving, including understanding that mathematics can represent real-world problems.	• Students apply their understanding of mathematics as a way to understand and solve real-world problems.

LESSON 1-4

Math Is Explaining and Sharing

Learning Target

- I can explain my thinking.

Standards ◆ Major ▲ Supporting ● Additional

Content

○ **K.G.A.1** Describe objects in the environment using names of shapes, and describe the relative positions of these objects using terms such as *above*, *below*, *beside*, *in front of*, *behind*, and *next to*.

Math Practices and Processes

MPP Construct arguments and critique the reasoning of others.

MPP Attend to precision.

Focus

Content Objectives	Language Objectives	SEL Objective
• Students explore ways to explain their thinking. • Students respond to the ideas of their classmates.	• Students explain their thinking and respond to classmates by using the verb *think*. • To support sense-making, ELs will participate in MLR8: Discussion Supports.	• Students practice showing respects for classmates as they share ideas and thinking.

Coherence

Previous	Now	Next
• Students explored ways that mathematics can represent real-world problems.	• Students explore ways to explain their thinking about mathematics.	• Students explore mathematical patterns.

Rigor

Conceptual Understanding	Procedural Skill & Fluency	Application
• Students understand that sharing their thinking about the mathematics they are using to solve problems is an important part of doing math.	• Students begin to develop proficiency with problem solving, including explaining their thinking about the math they are using.	• Students apply their understanding of the importance of sharing their ideas and their thinking about mathematics.

LESSON 1-5

Math Is Finding Patterns

Learning Targets

- I can notice patterns.
- I can describe patterns.

Standards ◆ Major ▲ Supporting ■ Additional

Content

○ A prekindergarten expectation is that students duplicate and extend simple patterns.

Math Practices and Processes

MPP Look for and make use of structure

MPP Look for and express regularity in repeated reasoning.

Focus

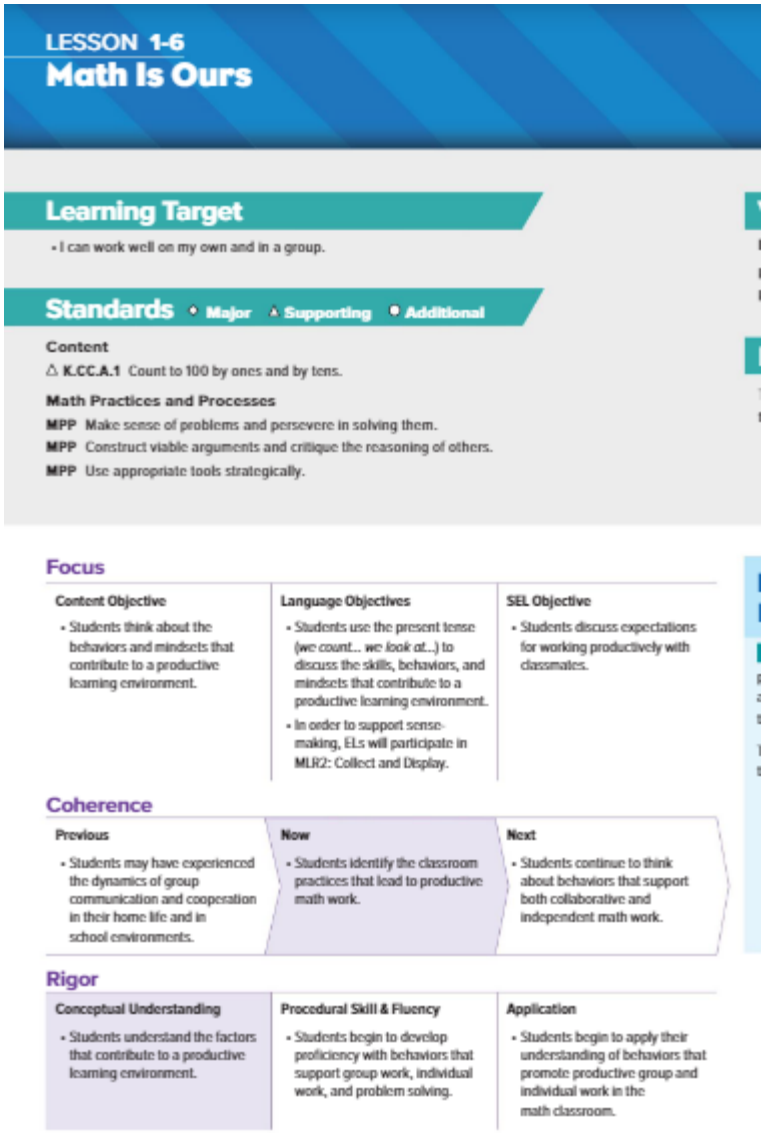
Content Objectives	Language Objectives	SEL Objective
• Students explore patterns. • Students describe patterns.	• Students use descriptive adjectives (colors, shapes) to describe a pattern. • In order optimize output, ELs will participate in MLR1: Stronger and Clearer Each Time.	• Students practice self-control as they learn to take turns when sharing ideas with a partner or in a group.

Coherence

Previous	Now	Next
• Students explored ways to explain their thinking about mathematics.	• Students explore mathematical patterns.	• Students discuss classroom norms for productive learning.

Rigor

Conceptual Understanding	Procedural Skill & Fluency	Application
• Students understand that patterns are an important part of doing math.	• Students begin to develop proficiency with doing math, including looking for and describing patterns	• Students apply their understanding of the importance of patterns in the doing of mathematics.



LESSON 1-6

Math Is Ours

Learning Target

- I can work well on my own and in a group.

Standards ◆ Major △ Supporting ⬟ Additional

Content

△ K.CC.A.1 Count to 100 by ones and by tens.

Math Practices and Processes

MPP Make sense of problems and persevere in solving them.

MPP Construct viable arguments and critique the reasoning of others.

MPP Use appropriate tools strategically.

Focus

Content Objective	Language Objectives	SEL Objective
• Students think about the behaviors and mindsets that contribute to a productive learning environment.	• Students use the present tense (*we count... we look at...*) to discuss the skills, behaviors, and mindsets that contribute to a productive learning environment. • In order to support sense-making, ELs will participate in MLR2: Collect and Display.	• Students discuss expectations for working productively with classmates.

Coherence

Previous	Now	Next
• Students may have experienced the dynamics of group communication and cooperation in their home life and in school environments.	• Students identify the classroom practices that lead to productive math work.	• Students continue to think about behaviors that support both collaborative and independent math work.

Rigor

Conceptual Understanding	Procedural Skill & Fluency	Application
• Students understand the factors that contribute to a productive learning environment.	• Students begin to develop proficiency with behaviors that support group work, individual work, and problem solving.	• Students begin to apply their understanding of behaviors that promote productive group and individual work in the math classroom.

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.

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:

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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.

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

MATH.K.CC.B.4	Understand the relationship between numbers and quantities; connect counting to cardinality.
MATH.K.CC.B.4.b	Understand that the last number name said tells the number of objects counted. The number of objects is the same regardless of their arrangement or the order in which they were counted.
MATH.K.G.A.1	Describe objects in the environment using names of shapes, and describe the relative positions of these objects using terms such as above, below, beside, in front of, behind, and next to.