Unit 8 Reveal Grade K

Content Area: **Math**
Course(s): **Language Arts, Art**
Time Period: **March**
Length: **3weeks**
Status: **Published**

Unit Overview

UNIT 8 PLANNER
Addition and Subtraction Strategies

PACING: **14 days**

LESSON	MATH OBJECTIVE	LANGUAGE OBJECTIVE	SOCIAL AND EMOTIONAL LEARNING OBJECTIVE	LESSON	KEY VOCABULARY
Unit Opener How Many Are Covered? Students compose and decompose numbers to identify a "mystery" number.					
8-1 Add within 5	Students solve addition equations within 5.	Students articulate solving addition equations within 5 by using the verbs *plus* and *equals*.	Students identify a problem, use creativity to execute problem-solving steps, and identify multiple solutions.	8-1	Math Terms add count on number path sum (total)
8-2 Subtract within 5	Students solve subtraction equations within 5.	Students articulate solving subtraction equations within 5 by using the verbs *minus* and *equals*.	Students set a focused mathematical goal and make a plan for achieving that goal.	8-2	count back difference number path subtract
8-3 Ways to Make 6 and 7	Students compose 6 and 7 in different ways.	Students articulate different ways to make 6 and 7 by listing the combinations using *might*.	Students identify and discuss the emotions experienced during math learning.	8-3	equation make (compose)
8-4 Ways to Decompose 6 and 7	Students decompose 6 and 7 in different ways.	Students articulate different ways to decompose 6 and 7 by listing the combinations using *can* and *could*.	Students exchange ideas for mathematical problem-solving with a peer, listening attentively and providing thoughtful and constructive feedback.	8-4	decompose (break apart) equation
Math Probe Ways to Make and Decompose 5, 6, and 7 Students circle the number that correctly completes a given equation.					
8-5 Ways to Make 8 and 9	Students compose 8 and 9 in different ways.	Students articulate different ways to make 8 and 9 by listing the combinations using *might*.	Students engage in active listening and work collaboratively with a partner to complete mathematical tasks.	8-5	equation make (compose)
8-6 Ways to Decompose 8 and 9	Students decompose 8 and 9 in different ways.	Students articulate different ways to decompose 8 and 9 by listing the combinations using *can* and *could*.	Students develop and execute a plan, including selecting tools for mathematical problem solving.	8-6	decompose (break apart) equation
8-7 Ways to Make 10	Students compose 10 in different ways and find different number combinations for 10.	Students articulate different ways to make 10 by listing the combinations using the modal *might*.	Students actively listen without interruption as peers describe how they approached a complex mathematical task.	8-7	equation make (compose)
8-8 Ways to Decompose 10	Students decompose 10 in different ways.	Students articulate different ways to decompose 10 by listing the combinations using *can* and *could*.	Students recognize personal strengths and areas for growth through thoughtful self-reflection.	8-8	decompose (break apart) equation
Unit Review **Fluency Practice**					
Unit Assessment **Performance Task**					

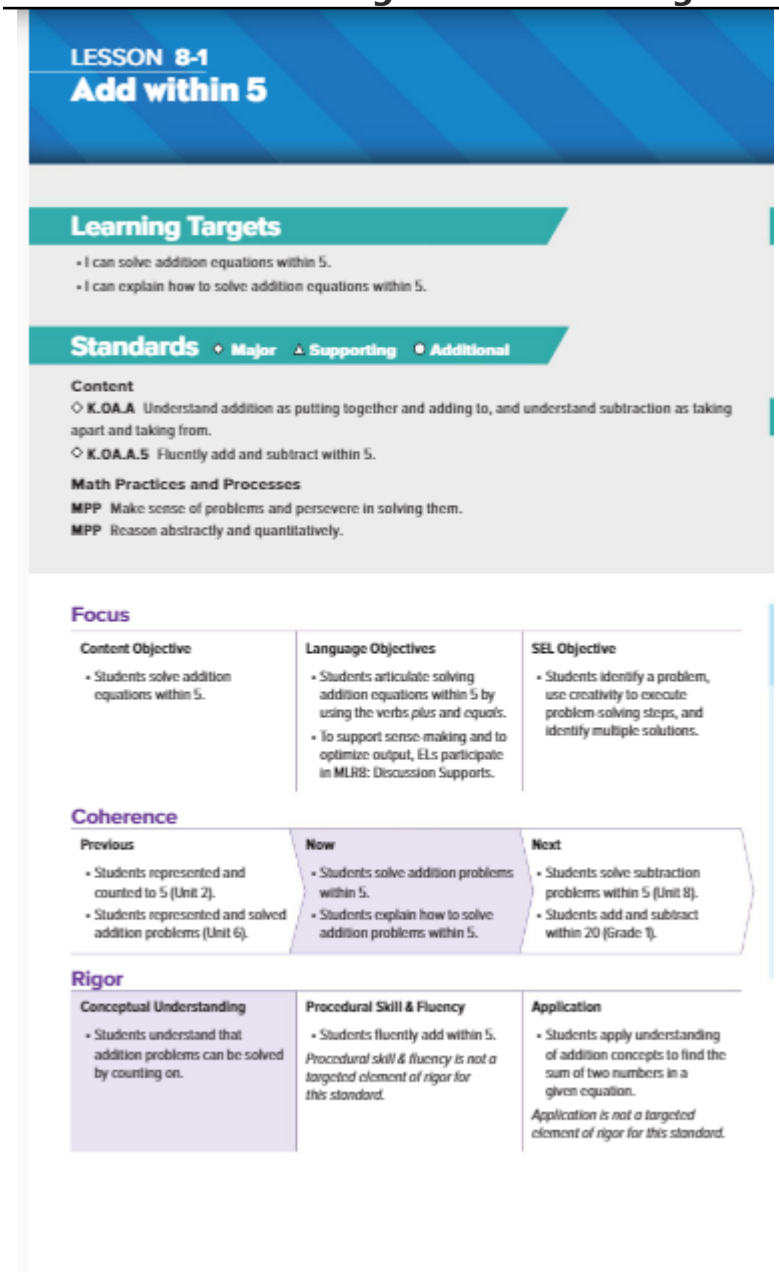
Enduring Understandings

See Above

Essential Questions

See Above

Instructional Strategies and Learning Activities



LESSON 8-1

Add within 5

Learning Targets

- I can solve addition equations within 5.
- I can explain how to solve addition equations within 5.

Standards ◆ Major ▲ Supporting ● Additional

Content

◇ **K.OA.A** Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.

◇ **K.OA.A.5** Fluently add and subtract within 5.

Math Practices and Processes

MPP Make sense of problems and persevere in solving them.

MPP Reason abstractly and quantitatively.

Focus

Content Objective	Language Objectives	SEL Objective
• Students solve addition equations within 5.	• Students articulate solving addition equations within 5 by using the verbs *plus* and *equals*. • To support sense-making and to optimize output, ELs participate in MLR8: Discussion Supports.	• Students identify a problem, use creativity to execute problem-solving steps, and identify multiple solutions.

Coherence

Previous	Now	Next
• Students represented and counted to 5 (Unit 2). • Students represented and solved addition problems (Unit 6).	• Students solve addition problems within 5. • Students explain how to solve addition problems within 5.	• Students solve subtraction problems within 5 (Unit 8). • Students add and subtract within 20 (Grade 1).

Rigor

Conceptual Understanding	Procedural Skill & Fluency	Application
• Students understand that addition problems can be solved by counting on.	• Students fluently add within 5. *Procedural skill & fluency is not a targeted element of rigor for this standard.*	• Students apply understanding of addition concepts to find the sum of two numbers in a given equation. *Application is not a targeted element of rigor for this standard.*

LESSON 8-2

Subtract within 5

Learning Targets

- I can solve subtraction equations within 5.
- I can explain how to solve subtraction equations within 5.

Standards ◆ Major ▲ Supporting ● Additional

Content

◇ **K.OA.A** Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.

◇ **K.OA.A.5** Fluently add and subtract within 5.

Math Practices and Processes

MPP Make sense of problems and persevere in solving them.

MPP Look for and make use of structure.

Focus

Content Objective	Language Objectives	SEL Objective
• Students solve subtraction equations within 5.	• Students articulate solving subtraction equations within 5 by using the verbs *minus* and *equals*. • To support Sense-Making and to optimize output, ELs participate in MLR8: Discussion Supports.	• Students set a focused mathematical goal and make a plan for achieving that goal.

Coherence

Previous	Now	Next
• Students represented and solved subtraction problems (Unit 7). • Students practiced adding within 5 (Unit 8).	• Students subtract within 5. • Students explain strategies for subtracting within 5.	• Students subtract within 100 (Grade 1).

Rigor

Conceptual Understanding	Procedural Skill & Fluency	Application
• Students understand that subtraction problems can be solved by counting back.	• Students fluently subtract within 5. *Procedural skill & fluency is not a targeted element of rigor for this standard.*	• Students apply subtraction concepts to solve real-life problems. *Application is not a targeted element of rigor for this standard.*

LESSON 8-3

Ways to Make 6 and 7

Learning Targets

- I can make 6 and 7 in different ways.
- I can explain how to make 6 and 7 in different ways.

Standards ◇ Major △ Supporting ○ Additional

Content

◇ **K.OA.A** Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.

◇ **K.OA.A.1** Represent addition and subtraction with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations.

Math Practices and Processes

MPP Make sense of problems and persevere in solving them.

MPP Construct viable arguments and critique the reasoning of others.

Focus

Content Objective	Language Objectives	SEL Objective
• Students compose 6 and 7 in different ways.	• Students articulate different ways to make 6 and 7 by listing the combinations using *might*. • To optimize output, ELs participate in MLR1: Stronger and Clearer Each Time.	• Students identify and discuss the emotions experienced during math learning.

Coherence

Previous	Now	Next
• Students represented and solved addition problems (Unit 6). • Students practiced addition within 5 (Unit 8).	• Students apply their understanding of composing numbers to compose 6 and 7 in different ways. • Students explain how to compose 6 and 7 in different ways.	• Students decompose 6 and 7 (Unit 8). • Students add and subtract within 20 (Grade 1).

Rigor

Conceptual Understanding	Procedural Skill & Fluency	Application
• Students understand that they can compose 6 and 7. • Students understand that 6 and 7 can be composed in different ways.	• Students add to compose 6 and 7. • Students find different ways to compose 6 and 7. *Procedural skill & fluency is not a targeted element of rigor for this lesson.*	• Students apply understanding of addition to compose 6 and 7. • Students apply understanding of number sense to find different ways to compose 6 and 7. *Application is not a targeted element of rigor for this lesson.*

LESSON 8-4

Ways to Decompose 6 and 7

Learning Targets

- I can decompose 6 and 7 in different ways.
- I can explain how to decompose 6 and 7 in different ways.

Standards ◇ Major △ Supporting ○ Additional

Content

◇ **K.OA.A** Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.

◇ **K.OA.A.3** Decompose numbers less than or equal to 10 into pairs in more than one way, e.g., by using objects or drawings, and record each decomposition by a drawing or equation (e.g., $5 = 2 + 3$ and $5 = 4 + 1$).

Math Practices and Processes

MPP Model with mathematics.

MPP Look for and make use of structure.

Focus

Content Objective	Language Objectives	SEL Objective
• Students decompose 6 and 7 in different ways.	• Students articulate different ways to decompose 6 and 7 by listing the combinations using *can* and *could*. • To support Sense-Making and to optimize output, ELs participate in MLR2: Collect and Display.	• Students exchange ideas for mathematical problem-solving with a peer, listening attentively and providing thoughtful and constructive feedback.

Coherence

Previous	Now	Next
• Students represented and solved subtraction problems (Unit 7). • Students subtracted within 5 (Unit 8).	• Students apply their understanding of decomposing numbers to decompose 6 and 7. • Students explain how to decompose 6 and 7.	• Students decompose 8 and 9 (Unit 8). • Students subtract within 100 (Grade 1).

Rigor

Conceptual Understanding	Procedural Skill & Fluency	Application
• Students understand that 6 and 7 can be decomposed in different ways.	• Students become fluent at decomposing 6 and 7 using models. *Procedural skill & fluency is not a targeted element of rigor for this standard.*	• Students apply understanding of decomposition to determine the different ways 6 and 7 can be decomposed. *Application is not a targeted element of rigor for this standard.*

LESSON 8-5

Ways to Make 8 and 9

Learning Targets

- I can make 8 and 9 in different ways.
- I can explain how to make 8 and 9 in different ways.

Standards ◆ Major ▲ Supporting ● Additional

Content

◇ **K.OA.A** Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.

◇ **K.OA.A.1** Represent addition and subtraction with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations.

Math Practices and Processes

MPP Reason abstractly and quantitatively.

MPP Look for and express regularity in repeated reasoning.

Focus

Content Objective	Language Objectives	SEL Objective
• Students compose 8 and 9 in different ways.	• Students articulate different ways to make 8 and 9 by listing the combinations using *might*. • To optimize output, ELs participate in MLR1: Stronger and Clearer Each Time.	• Students engage in active listening and work collaboratively with a partner to complete mathematical tasks.

Coherence

Previous	Now	Next
• Students represented and solved addition problems (Unit 6). • Students composed 6 and 7 (Unit 8).	• Students apply their understanding of composing numbers to compose 8 and 9 in different ways. • Students explain how to compose 8 and 9 in different ways.	• Students decompose 8 and 9 (Unit 8). • Students add and subtract within 20 (Grade 1).

Rigor

Conceptual Understanding	Procedural Skill & Fluency	Application
• Students understand that 8 and 9 can be composed in different ways. • Students understand that number compositions can be represented with equations.	• Students gain fluency composing numbers. *Procedural skill & fluency is not a targeted element of rigor for this standard.*	• Students apply their understanding of number composition to solve real-world problems. *Application is not a targeted element of rigor for this standard.*

LESSON 8-6

Ways to Decompose 8 and 9

Learning Targets

- I can decompose 8 and 9 in different ways.
- I can explain how to decompose 8 and 9 in different ways.

Standards ◇ Major △ Supporting ○ Additional

Content

◇ **K.OA.A** Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.

◇ **K.OA.A.3** Decompose numbers less than or equal to 10 into pairs in more than one way, e.g., by using objects or drawings, and record each decomposition by a drawing or equation (e.g., $5 = 2 + 3$ and $5 = 4 + 1$).

Math Practices and Processes

MPP Model with mathematics.

MPP Use appropriate tools strategically.

Focus

Content Objective	Language Objectives	SEL Objective
• Students decompose 8 and 9 in different ways.	• Students articulate different ways to decompose 8 and 9 by listing the combinations using *can* and *could*. • To support sense-making and to optimize output, ELs will participate in MLR2: Collect and Display.	• Students develop and execute a plan, including selecting tools for mathematical problem solving.

Coherence

Previous	Now	Next
• Students represented and solved subtraction problems (Unit 7). • Students found different ways to decompose 6 and 7 (Unit 8).	• Students apply their understanding of decomposing numbers to decompose 8 and 9 in different ways. • Students explain how to decompose 8 and 9 in different ways.	• Students find ways to decompose 10 (Unit 8). • Students subtract within 100 (Grade 1).

Rigor

Conceptual Understanding	Procedural Skill & Fluency	Application
• Students understand that 8 and 9 can be decomposed in different ways.	• Students gain fluency at decomposing 8 and 9 using models. *Procedural skill & fluency is not a targeted element of rigor for this standard.*	• Students apply understanding of ways to decompose 8 and 9 to solve problems involving real-world situations. *Application is not a targeted element of rigor for this standard.*

LESSON 8-7

Ways to Make 10

Learning Targets

- I can make 10 in different ways.
- I can find different number combinations for 10.

Standards ◆ Major ▲ Supporting ● Additional

Content

◇ **K.OA.A** Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.

◇ **K.OA.A.4** For any number from 1 to 9, find the number that makes 10 when added to the given number, e.g., by using objects or drawings, and record the answer with a drawing or equation.

Math Practices and Processes

MPP Construct viable arguments and critique the reasoning of others.

MPP Make sense of problems and persevere in solving them.

Focus

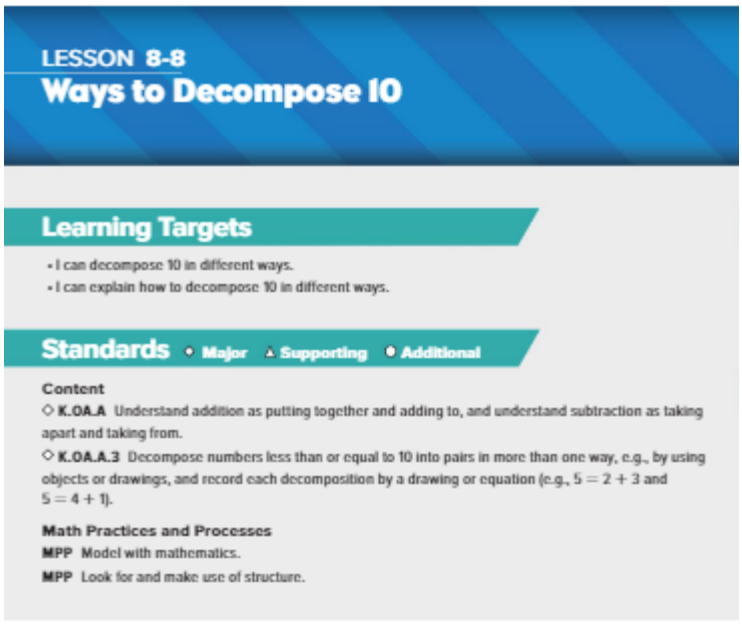
Content Objectives	Language Objectives	SEL Objective
• Students compose 10 in different ways and find different number combinations for 10.	• Students articulate different ways to make 10 by listing the combinations using the modal *might*. • In order to optimize output, ELs participate in MLR1: Stronger and Clearer Each Time.	• Students actively listen without interruption as peers describe how they approached a complex mathematical task.

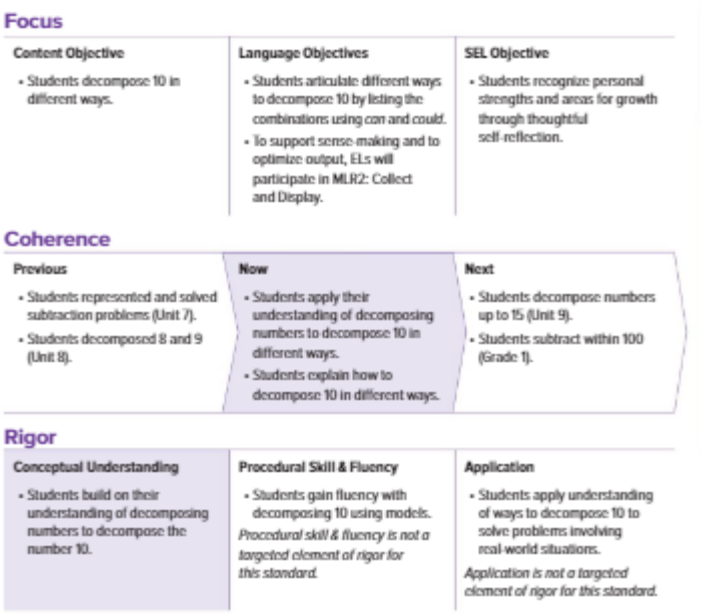
Coherence

Previous	Now	Next
• Students represented and solved addition problems (Unit 6). • Students composed 8 and 9 (Unit 8).	• Students apply their understanding of composing numbers to compose 10 in different ways. • Students explain how to compose 10 in different ways.	• Students decompose 10 (Unit 8). • Students add and subtract within 20 (Grade 1).

Rigor

Conceptual Understanding	Procedural Skill & Fluency	Application
• Students build on their understanding of composing numbers to compose the number 10 in different ways. • Students build on their understanding of writing equations to record compositions of 10 as equations.	• Students develop proficiency with composing the number 10. *Procedural skill & fluency is not a targeted element of rigor for this standard.*	• Students apply their understanding of number composition to solve real-world problems. *Application is not a targeted element of rigor for this standard.*





Integration of Career Readiness, Life Literacies and Key Skills

9.1.2.CR.1	Recognize ways to volunteer in the classroom, school and community.
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).
9.4.2.CI.2	Demonstrate originality and inventiveness in work (e.g., 1.3A.2CR1a).
9.1.2.CR.2	List ways to give back, including making donations, volunteering, and starting a business.
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).
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).
9.4.2.CT.3	Use a variety of types of thinking to solve problems (e.g., inductive, deductive).
9.1.2.FP.1	Explain how emotions influence whether a person spends or saves.
9.1.2.FP.3	Identify the factors that influence people to spend or save (e.g., commercials, family, culture, society).
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).
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.
9.1.2.PB.2	Explain why an individual would choose to save money.
9.4.2.DC.6	Identify respectful and responsible ways to communicate in digital environments.
9.4.2.DC.7	Describe actions peers can take to positively impact climate change (e.g., 6.3.2.CivicsPD.1).
9.4.2.TL.2	Create a document using a word processing application.
9.4.2.TL.5	Describe the difference between real and virtual experiences.
9.4.2.TL.6	Illustrate and communicate ideas and stories using multiple digital tools (e.g., SL.2.5.).
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

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.
8.1.2.DA.1	Collect and present data, including climate change data, in various visual formats.
8.1.2.DA.3	Identify and describe patterns in data visualizations.
8.1.2.DA.4	Make predictions based on data using charts or graphs.
8.1.2.AP.4	Break down a task into a sequence of steps.
8.1.2.AP.5	Describe a program’s sequence of events, goals, and expected outcomes.
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:



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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.OA	Operations and Algebraic Thinking
MA.K.OA.A.1	Represent addition and subtraction up to 10 with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations.
MA.K.OA.A.3	Decompose numbers less than or equal to 10 into pairs in more than one way, e.g., by using objects or drawings, and record each decomposition by a drawing or equation (e.g., 5 = 2 + 3 and 5 = 4 + 1).
MA.K.OA.A.4	For any number from 1 to 9, find the number that makes 10 when added to the given number, e.g., by using objects or drawings, and record the answer with a drawing or equation.
MA.K.OA.A.5	Demonstrate fluency for addition and subtraction within 5.