Unit 7 Reveal Grade 4

Content Area: **Math**
Course(s): **Math**
Time Period: **February**
Length: **2 weeks**
Status: **Published**

Unit Overview

UNIT 7 PLANNER

Division Strategies with Multi-Digit Dividends and 1-Digit Divisors

PACING: 12 days

LESSON		MATH OBJECTIVE	LANGUAGE OBJECTIVE	SOCIAL AND EMOTIONAL LEARNING OBJECTIVE	LESSON	KEY VOCABULARY
Unit Opener	IGNITE! Equal Shares? Model division with remainders using base-ten blocks.					
7-1	Divide Multiples of 10, 100, or 1,000	Students use basic division facts, the relationship between multiplication and division, and place value to divide multiples of 10, 100, or 1000. Students use number patterns to divide multiples of 10, 100, or 1,000.	Students discuss dividing multiples of 10, 100, and 1,000 using the term *tens, hundreds,* and *thousands.*	Students employ techniques that can be used to help maintain focus and manage reactions to potentially frustrating situations.	7-1	Math Terms dividend divisor multiple(s) quotient
7-2	Estimate Quotients	Students use compatible numbers and related division facts to estimate quotients. Students find a reasonable range for the estimate.	Students explain compatible numbers and related division facts to estimate quotients using the word *about.*	Students exchange ideas for mathematical problem-solving with a peer.	7-2	compatible numbers range
7-3	Find Equal Shares	Students use the equal share meaning of division to divide 2-digit dividends by 1-digit divisors.	Students describe the equal share meaning of division and explain how to solve problems using the term *share.*	Students identify and discuss the emotions experienced during math learning.	7-3	dividend divisor equal sharing quotient
7-4	Understand Partial Quotients	Students use partial quotients to divide 3-digit dividends by 1-digit divisors.	Students discuss using the partial quotients strategy to find quotients using the word *each.*	Students actively listen without interruption as peers describe how they approached a task.	7-4	partial quotients
7-5	Divide 4-Digit Dividends by 1-Digit Divisors	Students use partial quotients to divide 4-digit dividends by 1-digit divisors.	Students discuss using the area model to represent the partial quotients strategy using modals *can/could.*	Students explore taking different perspectives on approaches to problem solving.	7-5	area model partial quotients
7-6	Understand Remainders	Students divide multi-digit whole numbers that result in a quotient and a remainder. Students explain what a remainder means in the context of the problem.	Students discuss dividing multi-digit whole numbers using partial quotients to find quotients and remainders and explain the meaning of a remainder using the term *left over.*	Students discuss how a rule or routine can help develop mathematical skills and knowledge and be responsible contributors.	7-6	remainder
7-7	Make Sense of a Remainder	Students determine how to interpret the remainder of a division equation based on the context of the problem.	Students discuss how to interpret the remainder in a division problem using modals *can/could.*	Students discuss and practice strategies for managing stressful situations.	7-7	remainder
Math Probe	Interpreting Remainders Gather data on students' understandings of interpreting remainders.					
7-8	Solve Multi-Step Problems Using Division	Students solve multistep word problems involving division by representing these problems using equations with a variable.	Students discuss solving multi-step word problems using equations with a variable to represent the unknown using correct subject-verb agreement.	Students identify a problem, use creativity to execute problem-solving steps, and identify multiple solutions.	7-8	variable
Unit Review Fluency Practice						
Performance Task Unit Assessment						

Enduring Understandings

See Above

Essential Questions

See Above

Instructional Strategies and Learning Activities

LESSON 7-1

Divide Multiples of 10, 100, and 1,000

Learning Targets

- I can divide multiples of 10, 100, or 1,000 by using the relationship between multiplication and division, and place value.
- I can identify patterns with zeros in the quotients when dividing multiples of 10, 100, or 1,000 by 1-digit divisors.

Standards ◆ Major ▲ Supporting ● Additional

Content

◇ **4.NBT.B** Use place value understanding and properties of operations to perform multi-digit arithmetic.

◇ **4.NBT.B.6** Find whole-number quotients and remainders with up to four-digit dividends and one-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.

Math Practices and Processes

MPP Reason abstractly and quantitatively.

Focus

Content Objectives	Language Objectives	SEL Objective
• Students use strategies to divide multiples of 10, 100, or 1,000. • Students use number patterns to divide multiples of 10, 100, or 1,000.	• Students discuss dividing multiples of 10, 100, and 1,000 using the term *tens*, *hundreds*, and *thousands*. • To cultivate conversation, ELs participate in MLR7: Compare and Connect.	• Students employ techniques that can be used to help maintain focus and manage reactions to potentially frustrating situations.

Coherence

Previous	Now	Next
• Students multiplied by multiples of 10 (Grade 3). • Students multiplied single-digit numbers by multiples of 10, 100, and 1,000 (Unit 6).	• Students divide multiples of 10, 100, and 1,000 using strategies involving basic facts, place value, and the relationship between multiplication and division.	• Students represent fractions with denominators of 10 or 100 as decimals (Unit 12). • Students read and write decimals to thousandths (Grade 5).

Rigor

Conceptual Understanding	Procedural Skill & Fluency	Application
• Students identify patterns and use different strategies to divide multiples of 10, 100, and 1,000.	• Students build proficiency with dividing multiples of 10, 100, and 1,000 related to basic facts.	• Students apply their understanding of dividing multiples of 10, 100, and 1,000 to solve problems. *Application is not a targeted element of rigor for this standard.*

LESSON 7-2

Estimate Quotients

Learning Targets

- I can estimate quotients using compatible numbers and related division facts.
- I can determine a range for the estimated quotient.

Standards ◆ Major ▲ Supporting ● Additional

Content

◇ **4.NBT.B** Use place value understanding and properties of operations to perform multi-digit arithmetic.

◇ **4.NBT.B.6** Find whole-number quotients and remainders with up to four-digit dividends and one-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.

Math Practices and Processes

MPP Reason abstractly and quantitatively.

Focus

Content Objectives	Language Objectives	SEL Objective
• Students use compatible numbers and related division facts to estimate quotients. • Students find a reasonable range for the estimate.	• Students explain compatible numbers and related division facts to estimate quotients using the word about. • To support sense-making and optimize output, ELs participate in MLR2: Collect and Display and MLR1: Stronger and Clearer Each Time.	• Students exchange ideas for mathematical problem-solving with a peer, listening attentively and providing thoughtful and constructive feedback.

Coherence

Previous	Now	Next
• Students recalled basic division facts (Grade 3). • Students estimated products of multi-digit numbers (Unit 6).	• Students use compatible numbers and related division facts to estimate quotients of multi-digit numbers.	• Students use partial quotients to divide (Unit 7). • Students use partial quotients to divide by two-digit divisors (Grade 5).

Rigor

Conceptual Understanding	Procedural Skill & Fluency	Application
• Students extend their understanding of division as they use compatible numbers to estimate quotients.	• Students build fluency with estimating quotients.	• Students apply their understanding of estimating quotients to solve problems with real-world contexts. *Application is not a targeted element of rigor for this standard.*

LESSON 7-3

Find Equal Shares

Learning Targets

- I can divide 2-digit dividends by 1-digit divisors by using the equal sharing meaning of division.
- I can explain how to find how many in each group by using equal sharing.

Standards ◇ Major △ Supporting ○ Additional

Content

◇ **4.NBT.B** Use place value understanding and properties of operations to perform multi-digit arithmetic.

◇ **4.NBT.B.6** Find whole-number quotients and remainders with up to four-digit dividends and one-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.

Math Practices and Processes

MPP Reason abstractly and quantitatively.

Focus

Content Objective	Language Objectives	SEL Objective
• Students use the equal share meaning of division to divide 2-digit dividends by 1-digit divisors.	• Students describe the equal share meaning of division and explain how to solve problems using the term *share*. • To maximize meta-language, ELs participate in MLR5: Co-Craft Questions and Problems.	• Students identify and discuss the emotions experienced during math learning.

Coherence

Previous	Now	Next
• Students learned to fluently multiply and divide within 100 (Grade 3). • Students estimated quotients of multi-digit numbers (Unit 7).	• Students use the equal share meaning of division to divide 2-digit dividends by 1-digit divisors. • Students explain how to use the equal share meaning to solve problems.	• Students use partial quotients to find the quotients of 3-digit numbers divided by 1-digit numbers (Unit 7). • Students find whole number quotients of whole numbers with up to 4-digit dividends and 2-digit divisors (Grade 5).

Rigor

Conceptual Understanding	Procedural Skill & Fluency	Application
• Students extend their understanding of division by using the equal share meaning of division to divide a 2-digit number by a 1-digit divisor.	• Students develop proficiency in solving equal share word problems.	• Students apply their understanding of equal sharing to solve real-world problems. *Application is not a targeted element of rigor for this standard.*

LESSON 7-4

Understand Partial Quotients

Learning Targets

- I can divide 3-digit dividends by 1-digit divisors by using partial quotients.
- I can explain how to use partial quotients to solve a division problem with a 3-digit dividend.

Standards ◆ Major ▲ Supporting ○ Additional

Content

◇ **4.NBT.B** Use place value understanding and properties of operations to perform multi-digit arithmetic.

◇ **4.NBT.B.6** Find whole-number quotients and remainders with up to four-digit dividends and one-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.

Math Practices and Processes

MPP Reason abstractly and quantitatively.

Focus

Content Objective	Language Objectives	SEL Objective
• Students use partial quotients to divide 3-digit dividends by 1-digit divisors.	• Students discuss using the partial quotients strategy to find quotients using the word *each*. • To support sense-making, ELs participate in MLR8: Discussion Supports and MLR6: Three Reads.	• Students actively listen without interruption as peers describe how they approached a complex mathematical task.

Coherence

Previous	Now	Next
• Students learned to fluently multiply and divide within 100 (Grade 3). • Students used equal sharing to divide 2-digit dividends by 1-digit divisors (Unit 7).	• Students use the partial quotients strategy to find the quotients of 3-digit numbers divided by 1-digit numbers.	• Students use partial quotients to divide 4-digit numbers by 1-digit numbers (Unit 7). • Students find whole number quotients of whole numbers with up to 4-digit dividends and 2-digit divisors (Grade 5).

Rigor

Conceptual Understanding	Procedural Skill & Fluency	Application
• Students build understanding of the partial-quotients strategy to divide.	• Students develop proficiency in dividing 3-digit numbers by 1-digit numbers by using the partial-quotients strategy.	• Students apply the partial quotients strategy to solve real-world problems involving division. *Application is not a targeted element of rigor for this standard.*

LESSON 7-5

Divide 4-Digit Dividends by 1-Digit Divisors

Learning Targets

- I can divide 4-digit dividends by 1-digit divisors by using partial quotients.
- I can explain how to use partial quotients to solve a division problem with a 4-digit dividend.

Standards ◇ Major △ Supporting ○ Additional

Content

◇ **4.NBT.B** Use place value understanding and properties of operations to perform multi-digit arithmetic.

◇ **4.NBT.B.6** Find whole-number quotients and remainders with up to four-digit dividends and one-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.

Math Practices and Processes

MPP Look for and make use of structure.

Focus

Content Objective	Language Objectives	SEL Objective
• Students use partial quotients to divide 4-digit dividends by 1-digit divisors.	• Students discuss using the area model to represent the partial quotients strategy to divide using modals *can/could*. • To cultivate conversation, ELs participate in MLR4: Information Gap.	• Students explore taking different perspectives on approaches to problem solving.

Coherence

Previous	Now	Next
• Students learned to fluently multiply and divide within 100 (Grade 3). • Students divided 2-digit and 3-digit dividends by 1-digit divisors and explained their strategy (Unit 7).	• Students find quotients of 4-digit dividends and 1-digit divisors by using area models and partial quotients.	• Students use partial quotients to divide with remainders (Unit 7). • Students find whole number quotients of whole numbers with up to 4-digit dividends and 2-digit divisors (Grade 5).

Rigor

Conceptual Understanding	Procedural Skill & Fluency	Application
• Students build understanding of dividing multi-digit dividends by 1-digit divisors using the partial quotients strategy and area models.	• Students work on developing proficiency to use the partial quotients strategy to find the quotients of 4-digit dividends divided by 1-digit divisors.	• Students apply using partial quotients with 4-digit dividends and 1-digit divisors to solve real-world problems. *Application is not a targeted element of rigor for this standard.*

LESSON 7-6

Understand Remainders

Learning Targets

- I can divide multi-digit numbers and find quotients and remainders.
- I can explain the meaning of the remainder in a division problem.

Standards ◆ Major ▲ Supporting ● Additional

Content

◇ **4.NBT.B** Use place value understanding and properties of operations to perform multi-digit arithmetic.

◇ **4.NBT.B.6** Find whole-number quotients and remainders with up to four-digit dividends and one-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.

Math Practices and Processes

MPP Reason abstractly and quantitatively.

Focus

Content Objectives

- Students divide multi-digit whole numbers that result in a quotient and a remainder.
- Students explain what a remainder means in the context of the problem.

Language Objectives

- Students discuss dividing multi-digit whole numbers to find quotients and remainders and explain the meaning of a remainder using the term *left over*.
- To support sense-making, ELs participate in MLR2: Collect and Display and MLR6: Three Reads.

SEL Objective

- Students discuss how a rule or routine can help develop mathematical skills and knowledge and be responsible contributors.

Coherence

Previous

- Students learned to fluently multiply and divide within 100 (Grade 3).
- Students divided up to 4-digit dividends by 1-digit divisors using partial quotients (Unit 7).

Now

- Students divide up to 4-digit dividends by 1-digit divisors using partial quotients to find quotients and remainders.
- Students explain the meaning of a remainder.

Next

- Students interpret remainders. (Unit 7)
- Students find quotients of whole numbers with up to 4-digit dividends and 2-digit divisors (Grade 5).

Rigor

Conceptual Understanding

- Students build understanding of how to identify quotients and remainders and explain what the remainder means.

Procedural Skill & Fluency

- Students develop proficiency with identifying quotients and remainders.

Application

- Students apply their understanding of the meaning of remainders to solve problems in real-world context.

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

LESSON 7-7

Make Sense of a Remainder

Learning Targets

- I can solve division problems by finding the quotient and the remainder.
- I can decide how to interpret the remainder based on the context of the problem.

Standards ◇ Major △ Supporting ○ Additional

Content

◇ **4.OA.A** Use the four operations with whole numbers to solve problems.

◇ **4.OA.A.3** Solve multistep word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.

Math Practices and Processes

MPP Reason abstractly and quantitatively.

Focus

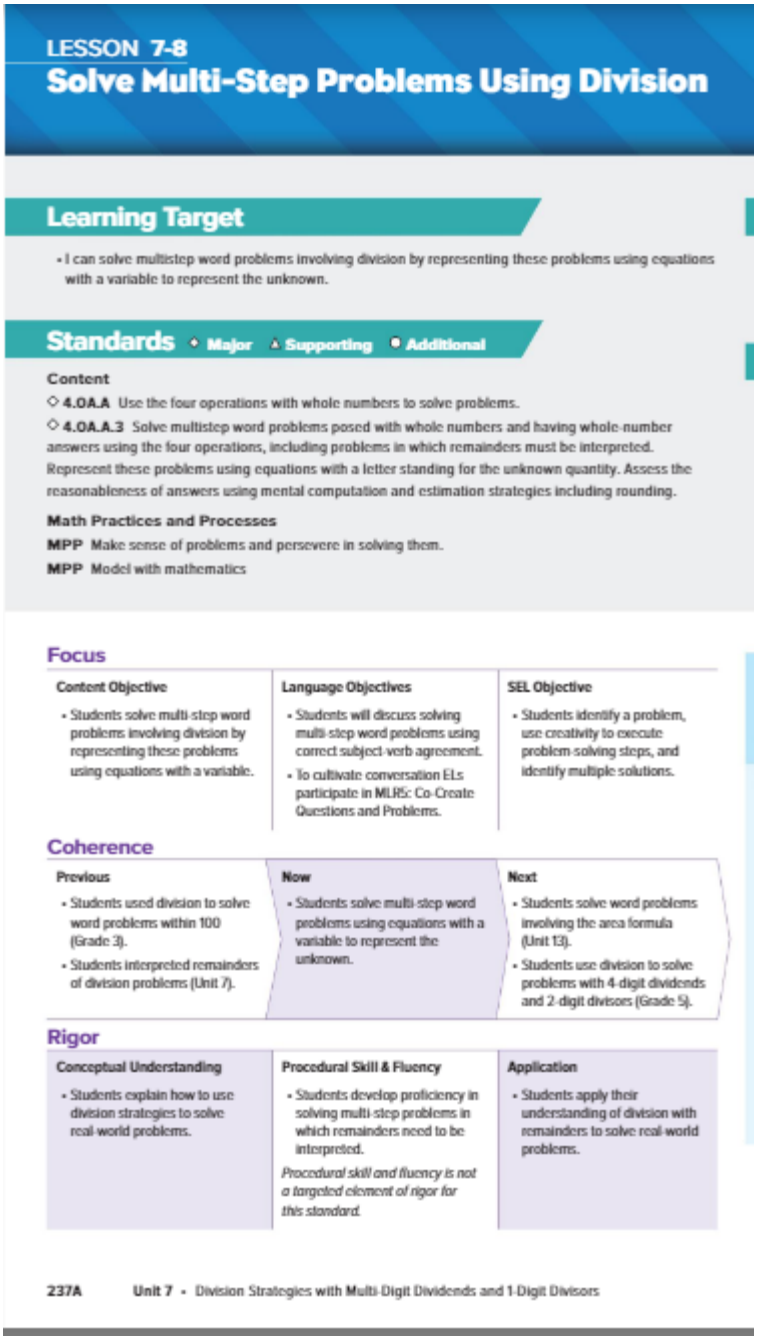
Content Objective	Language Objectives	SEL Objective
• Students determine how to interpret the remainder of a division equation based on the context of the problem.	• Students discuss how to interpret the remainder in a division problem using modals *can/could*. • To cultivate conversation, ELs participate in MLR7: Compare and Connect.	• Students discuss and practice strategies for managing stressful situations.

Coherence

Previous	Now	Next
• Students learned to fluently multiply and divide within 100 (Grade 3). • Students divided up to 4-digit dividends by 1-digit divisors to find quotients and remainders (Unit 7).	• Students divide using partial products to find quotients and remainders. • Students interpret the remainder based on the problem situation.	• Students solve multi-step word problems involving division (Unit 7). • Students find whole number quotients of whole numbers with up to 4-digit dividends and 2-digit divisors (Grade 5).

Rigor

Conceptual Understanding	Procedural Skill & Fluency	Application
• Students divide and determine how to interpret the remainder in a division problem based on the problem situation.	• Students develop proficiency in interpreting the remainders based on context. *Procedural skill and fluency is not a targeted element of rigor for this standard.*	• Students apply their understanding of remainders to interpret division remainders to answer real-world problems.



LESSON 7-8

Solve Multi-Step Problems Using Division

Learning Target

- I can solve multistep word problems involving division by representing these problems using equations with a variable to represent the unknown.

Standards ◆ Major ▲ Supporting ● Additional

Content

◇ **4.OA.A** Use the four operations with whole numbers to solve problems.

◇ **4.OA.A.3** Solve multistep word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.

Math Practices and Processes

MPP Make sense of problems and persevere in solving them.

MPP Model with mathematics

Focus

Content Objective	Language Objectives	SEL Objective
• Students solve multi-step word problems involving division by representing these problems using equations with a variable.	• Students will discuss solving multi-step word problems using correct subject-verb agreement. • To cultivate conversation ELs participate in MLR5: Co-Create Questions and Problems.	• Students identify a problem, use creativity to execute problem-solving steps, and identify multiple solutions.

Coherence

Previous	Now	Next
• Students used division to solve word problems within 100 (Grade 3). • Students interpreted remainders of division problems (Unit 7).	• Students solve multi-step word problems using equations with a variable to represent the unknown.	• Students solve word problems involving the area formula (Unit 13). • Students use division to solve problems with 4-digit dividends and 2-digit divisors (Grade 5).

Rigor

Conceptual Understanding	Procedural Skill & Fluency	Application
• Students explain how to use division strategies to solve real-world problems.	• Students develop proficiency in solving multi-step problems in which remainders need to be interpreted. *Procedural skill and fluency is not a targeted element of rigor for this standard.*	• Students apply their understanding of division with remainders to solve real-world problems.

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.4	Reading Informational Text
LA.RI.4.1	Refer to details and examples in a text and make relevant connections when explaining what the text says explicitly and when drawing inferences from the text.
LA.RI.4.3	Explain events, procedures, ideas, or concepts in a historical, scientific, or technical text, including what happened and why, based on specific information in the text.
LA.RI.4.4	Determine the meaning of general academic and domain-specific words or phrases in a text relevant to a grade 4 topic or subject area.
LA.RI.4.5	Describe the overall structure (e.g., chronology, comparison, cause/effect, problem/solution) of events, ideas, concepts, or information in a text or part of a text.
LA.RI.4.6	Compare and contrast a firsthand and secondhand account of the same event or topic; describe the differences in focus and the information provided.

LA.RI.4.8	Explain how an author uses reasons and evidence to support particular points in a text.
LA.RI.4.9	Integrate and reflect on (e.g., practical knowledge, historical/cultural context, and background knowledge) information from two texts on the same topic in order to write or speak about the subject knowledgeably.
LA.SL.4	Speaking and Listening
LA.SL.4.1	Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 4 topics and texts, building on others' ideas and expressing their own clearly.
LA.SL.4.2	Paraphrase portions of a text read aloud or information presented in diverse media and formats (e.g., visually, quantitatively, and orally).
LA.SL.4.3	Identify the reasons and evidence a speaker provides to support particular points.
LA.SL.4.4	Report on a topic or text, tell a story, or recount an experience in an organized manner, using appropriate facts and relevant, descriptive details to support main ideas or themes; speak clearly at an understandable pace.

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

MATH.4.OA.A.3	Solve multi-step word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.
MATH.4.NBT.B.6	Find whole-number quotients and remainders with up to four-digit dividends and one-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area model.