Unit 4 Reveal Grade 5

Content Area: **Math**
Course(s): **Math**
Time Period: **November**
Length: **3 weeks**
Status: **Published**

Unit overview

UNIT 4 PLANNER

Add and Subtract Decimals

PACING: 14 days

LESSON		MATH OBJECTIVE	LANGUAGE OBJECTIVE	SOCIAL AND EMOTIONAL LEARNING OBJECTIVE	LESSON	KEY VOCABULARY
Unit Opener	Intro! How Far? Estimate the width of the classroom using the number of steps.					
4-1	Estimate Sums and Differences of Decimals	Students estimate decimal sums and differences using the same strategies used with whole number sums and differences.	Students discuss estimating sums and differences of decimals while answering *Wh-* questions and using the verb *rounding*.	Students set a focused mathematical goal and make a plan for achieving that goal.	4-1	Math Terms decimal estimate
Math Probe	**Estimating Decimal Sums and Differences** Use estimation to determine if the sum of two decimal numbers is greater than or less than a benchmark number.				**Math Probe**	
4-2	Represent Addition of Decimals	Students use decimal grids to represent addition of decimals with the same number of decimal places.	Students discuss using decimal grids to represent addition of decimals while answering *Wh-* and Yes/No questions.	Students identify and discuss the emotions experienced during math learning.	4-2	decimal grid hundredths tenths
4-3	Represent Addition of Tenths and Hundredths	Students use decimal grids to represent addition of decimals with different numbers of decimal places.	Students discuss using decimal grids to add decimals while answering *Wh-* questions and using the adjective *similar*.	Students collaborate with peers to complete a mathematical task and offer constructive feedback to the idea posed by others.	4-3	decimal grid
4-4	Use Partial Sums to Add Decimals	Students use addition strategies they know, such as partial sums, to add decimals.	Students discuss addition strategies, such as partial sums, to add decimals while answering *Wh-* questions.	Students recognize and work to understand the emotions of others and practice empathetic responses.	4-4	decompose partial sums
4-5	Represent Subtraction of Decimals	Students use decimal grids to represent subtraction of decimals with the same number of decimal places.	Students explain how to use decimal grids to represent subtraction of decimals while answering *Wh-* and using *how much*.	Students collaborate with peers and contribute to group effort to achieve a collective mathematical goal.	4-5	decimal grid
4-6	Represent Subtraction of Tenths and Hundredths	Students use decimal grids to represent subtraction of decimals with different numbers of decimal places.	Students discuss using patterns to solve problems while answering *Wh-* questions and using *longer*.	Students break down a situation to identify the problem at hand.	4-6	decimal grid
4-7	Strategies to Subtract Decimals	Students can use subtraction strategies they know, such as partial differences, to subtract decimals.	Students discuss using subtraction strategies while answering *Wh-* and Yes/No questions and using adjectives such as *efficient* and *easier*.	Students recognize personal strengths through thoughtful self-reflection.	4-7	decompose
4-8	Explain Strategies to Add and Subtract Decimals	Students can explain their choice of strategy to solve.	Students discuss their choice of strategy to solve a problem while answering *Wh-* questions and using the adjective *efficient*.	Students exchange ideas for mathematical problem-solving with a peer, listening attentively and providing feedback.	4-8	decomposition partial sums
Unit Review **Fluency Practice**						
Unit Assessment **Performance Task**						

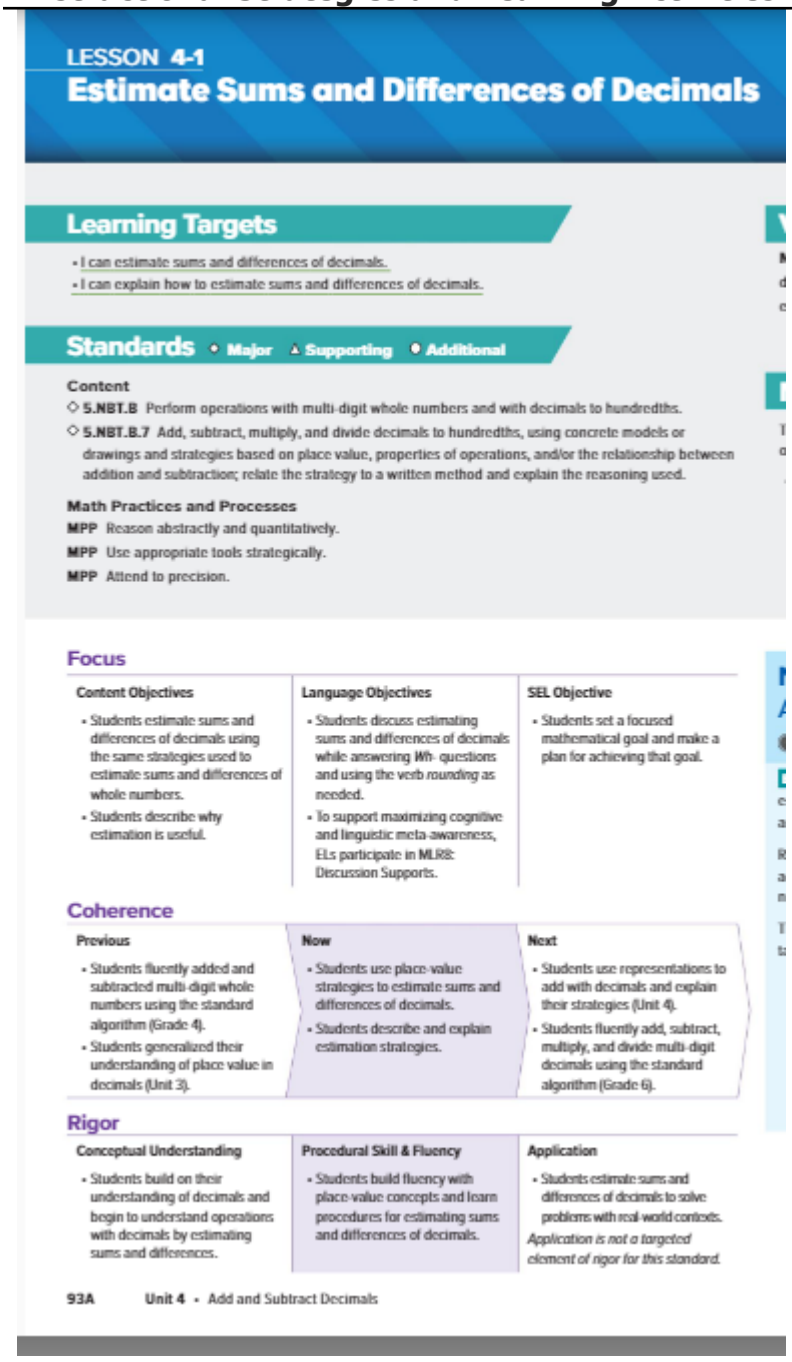
Enduring Understandings

See Above.

Essential Questions

See Above.

Instructional Strategies and Learning Activities



LESSON 4-1

Estimate Sums and Differences of Decimals

Learning Targets

- I can estimate sums and differences of decimals.
- I can explain how to estimate sums and differences of decimals.

Standards ◇ Major △ Supporting ○ Additional

Content

◇ **5.NBT.B** Perform operations with multi-digit whole numbers and with decimals to hundredths.

◇ **5.NBT.B.7** Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.

Math Practices and Processes

MPP Reason abstractly and quantitatively.

MPP Use appropriate tools strategically.

MPP Attend to precision.

Focus

Content Objectives

- Students estimate sums and differences of decimals using the same strategies used to estimate sums and differences of whole numbers.
- Students describe why estimation is useful.

Language Objectives

- Students discuss estimating sums and differences of decimals while answering *Wh-* questions and using the verb *rounding* as needed.
- To support maximizing cognitive and linguistic meta-awareness, ELs participate in MLR8: Discussion Supports.

SEL Objective

- Students set a focused mathematical goal and make a plan for achieving that goal.

Coherence

Previous

- Students fluently added and subtracted multi-digit whole numbers using the standard algorithm (Grade 4).
- Students generalized their understanding of place value in decimals (Unit 3).

Now

- Students use place-value strategies to estimate sums and differences of decimals.
- Students describe and explain estimation strategies.

Next

- Students use representations to add with decimals and explain their strategies (Unit 4).
- Students fluently add, subtract, multiply, and divide multi-digit decimals using the standard algorithm (Grade 6).

Rigor

Conceptual Understanding

- Students build on their understanding of decimals and begin to understand operations with decimals by estimating sums and differences.

Procedural Skill & Fluency

- Students build fluency with place-value concepts and learn procedures for estimating sums and differences of decimals.

Application

- Students estimate sums and differences of decimals to solve problems with real-world contexts.

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

LESSON 4-2

Represent Addition of Decimals

Learning Targets

- I can represent addition of decimals using decimal grids.
- I can represent addition of tenths and hundredths.

Standards ◇ Major △ Supporting ○ Additional

Content

◇ **5.NBT.B.7** Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.

Math Practices and Processes

MPP Model with mathematics.

MPP Use appropriate tools strategically.

Focus

Content Objective

- Students use decimal grids to represent addition of decimals with the same number of places.

Language Objectives

- Students discuss using decimal grids to represent addition of decimals while answering *Wh-* and Yes/No questions.
- Support optimizing output, MLR1: Stronger and Clearer Each Time.

SEL Objective

- Students identify and discuss the emotions experienced during math learning.

Coherence

Previous

- Students fluently added and subtracted multi-digit whole numbers using the standard algorithm (Grade 4).
- Students estimated sums and differences of decimals and explained estimation strategies (Unit 4).

Now

- Students use representations to add decimals.
- Students describe and explain their strategies for adding decimals.

Next

- Students add decimals using drawings and strategies based on place value (Unit 4).
- Students add, subtract, multiply, and divide decimals using the standard algorithm (Grade 6).

Rigor

Conceptual Understanding

- Students create and use representations to build their understanding of addition with decimals.

Procedural Skill & Fluency

- Students build fluency with place-value concepts and start to develop skills for adding decimals.

Application

- Students represent addition of decimals to solve problems in real-world contexts.

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

LESSON 4-3

Represent Addition of Tenths and Hundredth

Learning Targets

- I can explain how to use various strategies to add decimals.
- I can demonstrate how to use various strategies to add decimals.

Standards ◆ Major ▲ Supporting ● Additional

Content

◇ **5.NBT.B.7** Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.

Math Practices and Processes

MPP Attend to precision.

MPP Look for and make use of structure.

Focus

Content Objective	Language Objectives	SEL Objective
• Students use decimal grids to represent addition of decimals with different number of decimal places.	• Students discuss using decimal grids to add decimals while answering *Wh-* questions and using the adjective *similar*. • Support sense-making, MLR2: Collect and Display.	• 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 added and subtracted whole numbers using the standard algorithm (Grade 4). • Students used representations to add decimals with the same number of decimal places (Unit 4).	• Students add decimals in hundredths using concrete models, drawings, and strategies based on place value.	• Students use addition strategies to add decimals (Unit 4). • Students add, subtract, multiply, and divide decimals using the standard algorithm (Grade 6).

Rigor

Conceptual Understanding	Procedural Skill & Fluency	Application
• Students build on their understanding of place value, decimals, and operations with decimals.	• Students build fluency with place-value concepts and develop their skills for adding decimals.	• Students represent addition of decimals to solve problems in real-world contexts. *Application is not a specific element of rigor for this standard.*

LESSON 4-4

Use Partial Sums to Add Decimals

Learning Targets

- I can use strategies to add decimals.
- I can explain the strategy I use to add decimals.

Standards ◆ Major ▲ Supporting ● Additional

Content

◇ **5.NBT.B** Perform operations with multi-digit whole numbers and with decimals to hundredths.

◇ **5.NBT.B.7** Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.

Math Practices and Processes

MPP Construct viable arguments and critique the reasoning of others.

MPP Model with mathematics.

Focus

Content Objective	Language Objectives	SEL Objective
• Students use addition strategies they know, such as partial sums, to add decimals.	• Students talk about addition strategies they know, such as partial sums, to add decimals while answering *Wh-* questions. • To support optimizing output, ELs 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 fluently added and subtracted multi-digit whole numbers using the standard algorithm (Grade 4). • Students added decimals in hundredths using concrete models, drawings, and strategies based on place value (Unit 4).	• Students extend their understanding of addition strategies to add decimals.	• Students extend their understanding of decimals by representing subtraction of decimals (Unit 4). • Students fluently add, subtract, multiply, and divide multi-digit decimals using the standard algorithm for each operation (Grade 6).

Rigor

Conceptual Understanding	Procedural Skill & Fluency	Application
• Students build on their understanding of addition as they use strategies to add decimals.	• Students build proficiency in using decomposed numbers to represent decimal addition.	• Students are expected to apply their understanding of addition strategies to add decimals with real-world contexts. *Application is not a specific element of rigor for this standard.*

LESSON 4-5

Represent Subtraction of Decimals

Learning Targets

- I can represent subtraction of decimals less than 1 containing tenths.
- I can represent subtraction of decimals less than 1 containing hundredths.

Standards ◆ Major ▲ Supporting ● Additional

Content

◇ **5.NBT.B.7** Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.

Math Practices and Processes

MPP Reason abstractly and quantitatively.

MPP Model with mathematics.

MPP Use appropriate tools strategically.

Focus

Content Objective

- Students use decimal grids to represent subtraction of decimals with the same number of decimal places.

Language Objectives

- Students explain how to use decimal grids to represent subtraction of decimals while answering *Wh-* and using *how much* as needed.
- Support optimizing output, MLR4: Info Gap.

SEL Objective

- Students collaborate with peers and contribute to group effort to achieve a collective mathematical goal.

Coherence

Previous

- Students fluently added and subtracted multi-digit whole numbers using the standard algorithm (Grade 4).
- Students used addition strategies to add decimals (Unit 4).

Now

- Students extend their understanding of decimals by representing subtraction of decimals.

Next

- Students use decimal grids to subtract (Unit 4).
- Students add, subtract, multiply, and divide decimals using the standard algorithm (Grade 6).

Rigor

Conceptual Understanding

- Students create and use representations to build their understanding of subtraction with decimals.

Procedural Skill & Fluency

- Students build proficiency with place-value skills and start to develop skills for subtracting decimals through hundredths.

Application

- Students use decimal grids to represent subtraction of decimals with the same number of decimal places.

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

LESSON 4-6

Represent Subtraction of Tenths and Hundredths

Learning Targets

- I can subtract tenths from hundredths.
- I can subtract hundredths from tenths.

Standards ◇ Major △ Supporting ○ Additional

Content

◇ **5.NBT.B.7** Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.

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 use decimal grids to represent subtraction of decimals with different number of decimal places.	• Students discuss using patterns to solve problems while answering *Wh-* questions and using *longer than* and *more*. • Cultivate conversation, MLR3: Critique, Correct, and Clarify.	• Students break down a situation to identify the problem at hand.

Coherence

Previous	Now	Next
• Students added and subtracted whole numbers using the standard algorithm (Grade 4). • Students used representations to subtract decimals (Unit 4).	• Students extend their understanding of subtraction of decimals by using decimal grids to subtract tenths and hundredths.	• Students subtract decimals by decomposing the number being subtracted (Unit 4). • Students add, subtract, multiply, and divide decimals using the standard algorithm (Grade 6).

Rigor

Conceptual Understanding	Procedural Skill & Fluency	Application
• Students build on their understanding of subtraction of decimals by using decimal grids to represent subtraction.	• Students build proficiency breaking down decimals into whole parts and decimal parts and writing equivalent names for decimals.	• Students represent subtraction of decimals to solve problems with real-world contexts. *Application is not a specific element of rigor for this standard.*

LESSON 4-7

Strategies to Subtract Decimals

Learning Targets

- I can use strategies to subtract decimals.
- I can explain the strategy I use to subtract decimals.

Standards ◇ Major △ Supporting ○ Additional

Content

◇ **5.NBT.B.7** Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.

Math Practices and Processes

MPP Construct viable arguments and critique the reasoning of others.

MPP Use appropriate tools strategically.

Focus

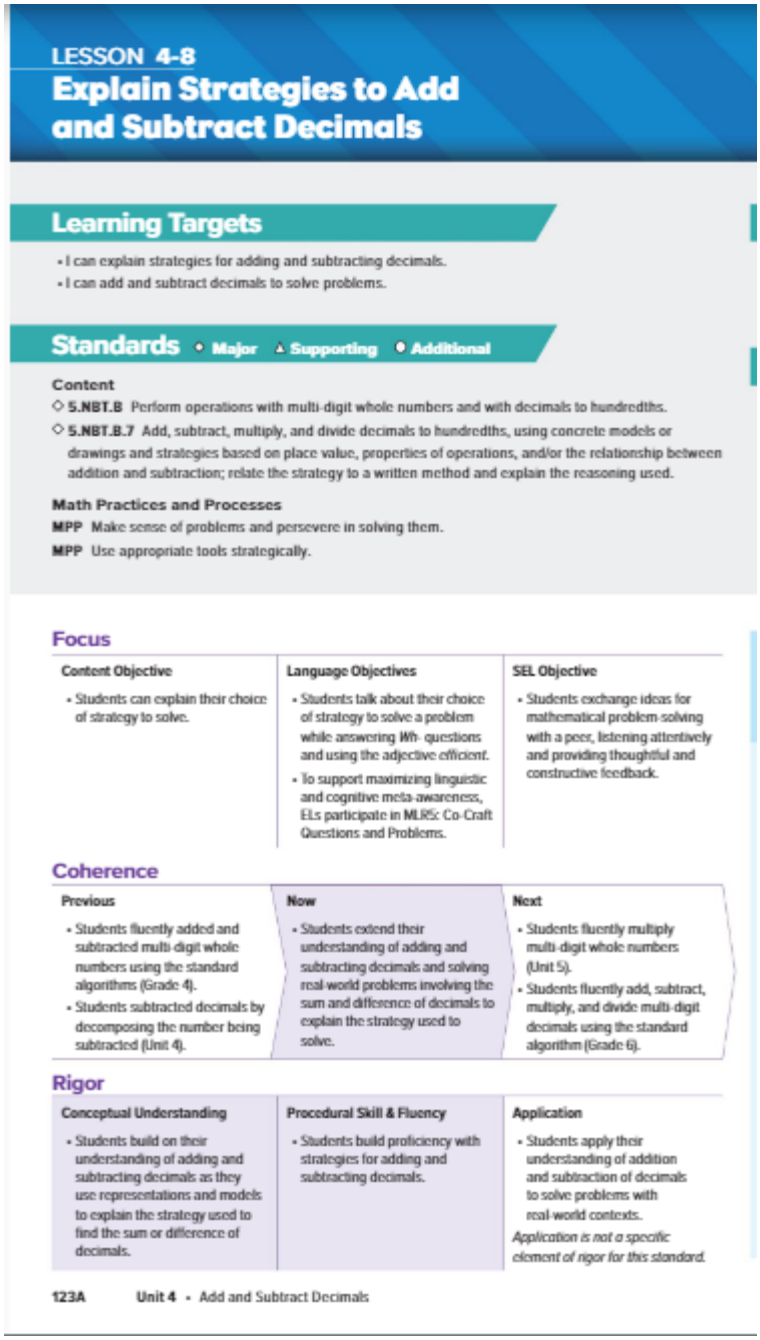
Content Objective	Language Objectives	SEL Objective
• Students can use subtraction strategies they know, such as partial differences and the relationship between addition and subtraction, to subtract decimals.	• Students discuss subtraction strategies while answering *Wh-* and Yes/No questions and using adjectives such as *efficient* and *easier*. • Support optimizing output, MLR7: Compare and Connect.	• Students recognize personal strengths through thoughtful self-reflection.

Coherence

Previous	Now	Next
• Students added and subtracted whole numbers using the standard algorithm (Grade 3). • Students used representations to subtract tenths and hundredths (Unit 4).	• Students subtract decimals by decomposing the number being subtracted. • Students connect subtraction to addition by counting up on a number line to find the difference.	• Students use adding and subtracting decimals to solve real-world problems (Unit 4). • Students add, subtract, multiply, and divide decimals using the standard algorithm (Grade 6).

Rigor

Conceptual Understanding	Procedural Skill & Fluency	Application
• Students build on their understanding of subtraction as they notice similarities between subtracting whole numbers and subtracting decimals.	• Students build proficiency with subtraction facts and strategies for subtracting decimals.	• Students use subtraction strategies, such as partial differences to subtract decimals. *Application is not a specific element of rigor for this standard.*



LESSON 4-8

Explain Strategies to Add and Subtract Decimals

Learning Targets

- I can explain strategies for adding and subtracting decimals.
- I can add and subtract decimals to solve problems.

Standards ◆ Major ▲ Supporting ● Additional

Content

◇ **5.NBT.B** Perform operations with multi-digit whole numbers and with decimals to hundredths.

◇ **5.NBT.B.7** Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.

Math Practices and Processes

MPP Make sense of problems and persevere in solving them.

MPP Use appropriate tools strategically.

Focus

Content Objective	Language Objectives	SEL Objective
• Students can explain their choice of strategy to solve.	• Students talk about their choice of strategy to solve a problem while answering *Wh-* questions and using the adjective *efficient*. • To support maximizing linguistic and cognitive meta-awareness, ELs participate in MLR5: Co-Craft Questions and Problems.	• Students exchange ideas for mathematical problem-solving with a peer, listening attentively and providing thoughtful and constructive feedback.

Coherence

Previous	Now	Next
• Students fluently added and subtracted multi-digit whole numbers using the standard algorithms (Grade 4). • Students subtracted decimals by decomposing the number being subtracted (Unit 4).	• Students extend their understanding of adding and subtracting decimals and solving real-world problems involving the sum and difference of decimals to explain the strategy used to solve.	• Students fluently multiply multi-digit whole numbers (Unit 5). • Students fluently add, subtract, multiply, and divide multi-digit decimals using the standard algorithm (Grade 6).

Rigor

Conceptual Understanding	Procedural Skill & Fluency	Application
• Students build on their understanding of adding and subtracting decimals as they use representations and models to explain the strategy used to find the sum or difference of decimals.	• Students build proficiency with strategies for adding and subtracting decimals.	• Students apply their understanding of addition and subtraction of decimals to solve problems with real-world contexts. *Application is not a specific element of rigor for this standard.*

123A Unit 4 • Add and Subtract Decimals

Integration of Career Readiness, Life Literacies and Key Skills

9.4.8.CI.1	Assess data gathered on varying perspectives on causes of climate change (e.g., cross-cultural, gender-specific, generational), and determine how the data can best be used to design multiple potential solutions (e.g., RI.7.9, 6.SP.B.5, 7.1.NH.IPERS.6, 8.2.8.ETW.4).
9.2.5.CAP.1	Evaluate personal likes and dislikes and identify careers that might be suited to personal likes.
9.2.5.CAP.2	Identify how you might like to earn an income.
9.2.5.CAP.3	Identify qualifications needed to pursue traditional and non-traditional careers and occupations.

9.4.8.CI.4	Explore the role of creativity and innovation in career pathways and industries.
9.2.5.CAP.4	Explain the reasons why some jobs and careers require specific training, skills, and certification (e.g., life guards, child care, medicine, education) and examples of these requirements.
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).
9.4.8.CT.2	Develop multiple solutions to a problem and evaluate short- and long-term effects to determine the most plausible option (e.g., MS-ETS1-4, 6.1.8.CivicsDP.1).
9.4.8.CT.3	Compare past problem-solving solutions to local, national, or global issues and analyze the factors that led to a positive or negative outcome.
9.4.8.DC.2	Provide appropriate citation and attribution elements when creating media products (e.g., W.6.8).
9.1.2.PB.2	Explain why an individual would choose to save money.
9.4.8.DC.4	Explain how information shared digitally is public and can be searched, copied, and potentially seen by public audiences.
9.4.8.DC.5	Manage digital identity and practice positive online behavior to avoid inappropriate forms of self-disclosure.
9.4.8.DC.8	Explain how communities use data and technology to develop measures to respond to effects of climate change (e.g., smart cities).
9.4.8.GCA.1	Model how to navigate cultural differences with sensitivity and respect (e.g., 1.5.8.C1a).
9.4.8.GCA.2	Demonstrate openness to diverse ideas and perspectives through active discussions to achieve a group goal.
9.4.8.IML.2	Identify specific examples of distortion, exaggeration, or misrepresentation of information.
9.4.8.IML.3	Create a digital visualization that effectively communicates a data set using formatting techniques such as form, position, size, color, movement, and spatial grouping (e.g., 6.SP.B.4, 7.SP.B.8b).
9.4.8.IML.4	Ask insightful questions to organize different types of data and create meaningful visualizations.
9.4.8.IML.5	Analyze and interpret local or public data sets to summarize and effectively communicate the data.
9.4.8.IML.7	Use information from a variety of sources, contexts, disciplines, and cultures for a specific purpose (e.g., 1.2.8.C2a, 1.4.8.CR2a, 2.1.8.CHSS/IV.8.AI.1, W.5.8, 6.1.8.GeoSV.3.a, 6.1.8.CivicsDP.4.b, 7.1.NH. IPRET.8).
9.4.8.IML.12	Use relevant tools to produce, publish, and deliver information supported with evidence for an authentic audience.
9.4.8.TL.1	Construct a spreadsheet in order to analyze multiple data sets, identify relationships, and facilitate data-based decision-making.
9.4.8.TL.2	Gather data and digitally represent information to communicate a real-world problem (e.g., MS-ESS3-4, 6.1.8.EconET.1, 6.1.8.CivicsPR.4).
9.4.8.TL.3	Select appropriate tools to organize and present information digitally.
9.4.8.TL.5	Compare the process and effectiveness of synchronous collaboration and asynchronous collaboration.
9.4.8.TL.6	Collaborate to develop and publish work that provides perspectives on a real-world problem.

Technology and Design Thinking

8.1.5.CS.3	Identify potential solutions for simple hardware and software problems using common troubleshooting strategies.
	Data can be organized, displayed, and presented to highlight relationships.
8.1.5.DA.1	Collect, organize, and display data in order to highlight relationships or support a claim.
8.1.5.DA.3	Organize and present collected data visually to communicate insights gained from different views of the data.
8.1.5.DA.4	Organize and present climate change data visually to highlight relationships or support a claim.

Interdisciplinary Connections

LA.RI.5.1	Quote accurately from a text and make relevant connections when explaining what the text says explicitly and when drawing inferences from the text.
LA.RI.5.2	Determine two or more main ideas of a text and explain how they are supported by key details; summarize the text.
LA.RI.5.3	Explain the relationships or interactions between two or more individuals, events, ideas, or concepts in a historical, scientific, or technical text based on specific information in the text.
LA.RI.5.4	Determine the meaning of general academic and domain-specific words and phrases in a text relevant to a grade 5 topic or subject area.
LA.RI.5.5	Compare and contrast the overall structure (e.g., chronology, comparison, cause/effect, problem/solution) of events, ideas, concepts, or information in two or more texts.
LA.RI.5.6	Analyze multiple accounts of the same event or topic, noting important similarities and differences in the point of view they represent.
LA.RI.5.7	Draw on information from multiple print or digital sources, demonstrating the ability to locate an answer to a question quickly or to solve a problem efficiently.
LA.RI.5.8	Explain how an author uses reasons and evidence to support particular points in a text, identifying which reasons and evidence support which point(s).
LA.RI.5.9	Integrate and reflect on (e.g., practical knowledge, historical/cultural context, and background knowledge) information from several texts on the same topic in order to write or speak about the subject knowledgeably.
LA.RI.5.10	By the end of year, read and comprehend literary nonfiction at grade level text-complexity or above, with scaffolding as needed.
LA.W.5.4	Produce clear and coherent writing in which the development and organization are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1–3 above.)
LA.SL.5.1	Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 5 topics and texts, building on others' ideas and expressing their own clearly.
LA.L.5.1	Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.
LA.L.5.2	Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.

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:

Use Differentiation guide in Teacher's manual for each 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:

End of 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 Observations

Checklists

Questions and Discussions

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

5.NBT.B.7	Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.