Unit 9 Reveal Grade 5

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

Unit overview

UNIT 9 PLANNER

Add and Subtract Fractions

PACING: 13 days

LESSON		MATH OBJECTIVE	LANGUAGE OBJECTIVE	SOCIAL AND EMOTIONAL LEARNING OBJECTIVE	LESSON	KEY VOCABULARY
Unit Opener	IGNITE! Fraction Wall	Students use a fraction wall to explore ways to make a fraction using fractions with different denominators.				
9-1	Estimate Sums and Differences of Fractions	Students use benchmark numbers to estimate sums and differences of fractions. Students explain how to use an estimate to predict or check the reasonableness of a calculated sum or difference of fractions.	Students talk about benchmark numbers to estimate the sums and differences of fractions using *greater than* and *less than*.	Students determine how they can break a problem down to make it easier to solve.	9-1	Math Terms benchmark number estimate
Math Probe	Make an Estimate of the Sum	Students use strategies to reason about the magnitude of and addition of fractions.				
9-2	Represent Addition of Fractions with Unlike Denominators	Students use and explain how to use a representation to add fractions with unlike denominators.	Students explain how to use a representation to add fractions with unlike denominators using *can*.	Students exchange ideas for mathematical problem-solving with a peer and provide thoughtful and constructive feedback.	9-2	denominator equivalent fractions fraction tiles like denominators numerator
9-3	Add Fractions with Unlike Denominators	Students add and explain how to add fractions with unlike denominators.	Students explain how to add fractions with unlike denominators using *should*.	Students actively listen without interruption as peers describe how they approached a complex mathematical task.	9-3	equivalent fractions like denominator multiple
9-4	Represent Subtraction of Fractions with Unlike Denominators	Students use and explain how to use a representation to subtract fractions with unlike denominators.	Students explain how to use a representation to subtract fractions with unlike denominators using *can*.	Students employ self-calming techniques that can be used to help manage reactions to potentially frustrating situations.	9-4	denominator equivalent fractions
9-5	Subtract Fractions with Unlike Denominators	Students subtract and explain how to subtract fractions with unlike denominators.	Students explain how to subtract fractions with unlike denominators using *can* and *should*.	Students practice staying focused on a mathematical problem for a set time.	9-5	denominator equivalent fractions
9-6	Add Mixed Numbers with Unlike Denominators	Students add and explain how to add mixed numbers with unlike denominators.	Students talk about adding mixed numbers with unlike denominators using *can* and *use*.	Students identify multiple possible solutions for a given math problem.	9-6	equivalent fractions mixed number
9-7	Subtract Mixed Numbers with Unlike Denominators	Students subtract and explain how to subtract mixed numbers with unlike denominators.	Students talk about subtracting mixed numbers with unlike denominators using *can*, *should*, *same*, and *different*.	Students practice segmenting a complex mathematical task into smaller achievable tasks.	9-7	equivalent fractions mixed number
9-8	Add and Subtract Mixed Numbers with Regrouping	Students add and subtract mixed numbers with regrouping.	Students talk about adding and subtracting mixed numbers with regrouping using *rearrange* and *rename*.	Students work toward completing a mathematical task independently using prior knowledge or understanding of mathematical concepts.	9-8	equivalent fractions mixed number
9-9	Solve Problems Involving Fractions and Mixed Numbers	Students solve word problems involving fractions.	Students explain how to solve word problems with fractions using *can*, *should*, *reasonable*, and *estimate*.	Students identify a problem and execute the steps necessary to solve the problem.	9-9	equivalent fractions mixed number
Unit Review Fluency Practice						
Performance Task Unit Assessment						

Enduring Understandings

See Above.

Essential Questions

See Above.

Instructional Strategies and Learning Activities

LESSON 9-1

Estimate Sums and Differences of Fractions

Learning Targets

- I can use benchmark numbers to estimate the sums and differences of fractions.
- I can explain how to use an estimate to predict a calculated solution.
- I can explain how to use an estimate to check the reasonableness of a calculated solution.

Standards ◇ Major △ Supporting ○ Additional

Content

◇ **5.NF.A.2** Solve word problems involving addition and subtraction of fractions referring to the same whole, including cases of unlike denominators, e.g., by using visual fraction models or equations to represent the problem. Use benchmark fractions and number sense of fractions to estimate mentally and assess the reasonableness of answers.

Math Practices and Processes

MPP Construct viable arguments and critique the reasoning of others.

Focus

Content Objectives	Language Objectives	SEL Objective
• Students use benchmark numbers to estimate sums and differences of fractions. • Students explain how to use an estimate to predict or check the reasonableness of a calculated sum or difference of fractions.	• Students talk about benchmark numbers to estimate the sums and differences of fractions using *greater than* and *less than*. • To support cultivating conversation, ELs participate in MLR8: Discussion Supports.	• Students determine how they can break a problem down to make it easier to solve.

Coherence

Previous	Now	Next
• Students compared two fractions having different numerators and different denominators (Grade 4). • Students added and subtracted decimals (Unit 4).	• Students use benchmark fractions to estimate the sums and differences of fractions and assess the reasonableness of calculated solutions.	• Students use representations to understand addition of fractions having unlike denominators (Unit 9).

Rigor

Conceptual Understanding	Procedural Skill & Fluency	Application
• Students build understanding of estimation as they estimate sums and differences of fractions and determine the reasonableness of proposed answers.	• Students develop proficiency making estimates. *Procedural Skill & Fluency is not a targeted element of rigor for this standard.*	• Students estimate sums and differences of fractions and determine the reasonableness of proposed answers in real-world contexts.

LESSON 9-2

Represent Addition of Fractions with Unlike Denominators

Learning Targets

- I can use a representation to add fractions with unlike denominators.
- I can explain how to use a representation to add fractions with unlike denominators.

Standards ◇ Major △ Supporting ○ Additional

Content

◇ **5.NF.A** Use equivalent fractions as a strategy to add and subtract fractions.

◇ **5.NF.A.1** Add and subtract fractions with unlike denominators (including mixed numbers) by replacing given fractions with equivalent fractions in such a way as to produce an equivalent sum or difference of fractions with like denominators. $\left(\text{In general, } \frac{a}{b} + \frac{c}{d} = \frac{(ad + bc)}{bd}\right)$.

Math Practices and Processes

MPP Use appropriate tools strategically.

Focus

Content Objectives	Language Objectives	SEL Objective
• Students use a representation to add fractions with unlike denominators. • Students explain how to use a representation to add fractions with unlike denominators.	• Students explain how to use a representation to add fractions with unlike denominators using *can*. • To support optimizing output, ELs participate in MLR1: Stronger and Clearer Each Time.	• Students exchange ideas for mathematical problem-solving with a peer and provide thoughtful and constructive feedback.

Coherence

Previous	Now	Next
• Students understood, recognized, and generated equivalent fractions (Grade 4). • Students used benchmark fractions to estimate the sums and differences of fractions and assess the reasonableness of calculated solutions (Unit 9).	• Students use representations to understand addition of fractions having unlike denominators.	• Students use equivalent fractions to add fractions having unlike denominators (Unit 9). • Students solve real-world and mathematical problems by writing and solving equations of the form $x + p = q$ and $px = q$ (Grade 6).

Rigor

Conceptual Understanding	Procedural Skill & Fluency	Application
• Students develop their understanding of adding fractions with unlike denominators.	• Students build proficiency with equivalent fractions as they represent addition of fractions with unlike denominators.	• Students explore addition of fractions in real-world contexts. *Application is not a targeted element of rigor for this standard.*

LESSON 9-3

Add Fractions with Unlike Denominators

Learning Targets

- I can add fractions with unlike denominators.
- I can explain how to add fractions with unlike denominators.

Standards ◇ Major △ Supporting ○ Additional

Content

◇ **5.NF.A** Use equivalent fractions as a strategy to add and subtract fractions.

◇ **5.NF.A.1** Add and subtract fractions with unlike denominators (including mixed numbers) by replacing given fractions with equivalent fractions in such a way as to produce an equivalent sum or difference of fractions with like denominators. $\left(\text{In general, } \frac{a}{b} + \frac{c}{d} = \frac{(ad + bc)}{bd}\right)$.

Math Practices and Processes

MPP Make sense of problems and persevere in solving them.

Focus

Content Objectives	Language Objectives	SEL Objective
• Students add fractions with unlike denominators. • Students explain how to add fractions with unlike denominators.	• Students explain how to add fractions with unlike denominators using *should*. • To support optimizing output, ELs participate in MLR7: Compare and Connect.	• Students actively listen without interruption as peers describe how they approached a complex mathematical task.

Coherence

Previous	Now	Next
• Students understood, recognized, and generated equivalent fractions (Grade 4). • Students used representations to understand addition of fractions having unlike denominators (Unit 9).	• Students use equivalent fractions to add fractions having unlike denominators.	• Students use representations to understand subtraction of fractions having unlike denominators (Unit 9). • Students solve real-world and mathematical problems by writing and solving equations of the form $x + p = q$ and $px = q$ (Grade 6).

Rigor

Conceptual Understanding	Procedural Skill & Fluency	Application
• Students build on their understanding of operations with fractions.	• Students build proficiency with equivalent fractions and develop general skills and strategies for adding fractions.	• Students solve problems with real-world contexts. *Application is not a targeted element of rigor for this standard.*

LESSON 9-4

Represent Subtraction of Fractions with Unlike Denominators

Learning Targets

- I can use a representation to subtract fractions with unlike denominators.
- I can explain how to use a representation to subtract fractions with unlike denominators.

Standards ◆ Major ▲ Supporting ● Additional

Content

◇ **5.NF.A** Use equivalent fractions as a strategy to add and subtract fractions.

◇ **5.NF.A.1** Add and subtract fractions with unlike denominators (including mixed numbers) by replacing given fractions with equivalent fractions in such a way as to produce an equivalent sum or difference of fractions with like denominators. $\left(\text{In general, } \frac{a}{b} + \frac{c}{d} = \frac{(ad + bc)}{bd}\right)$.

Math Practices and Processes

MPP Model with mathematics.

MPP Look for and express regularity in repeated reasoning.

Focus

Content Objectives	Language Objectives	SEL Objective
• Students use a representation to subtract fractions with unlike denominators. • Students explain how to use a representation to subtract fractions with unlike denominators.	• Students explain how to use a representation to subtract fractions with unlike denominators using *can*. • To support sense-making, ELs participate in MLR2: Collect and Display.	• Students employ self-calming techniques that can be used to help manage reactions to potentially frustrating situations.

Coherence

Previous	Now	Next
• Students understood, recognized, and generated equivalent fractions (Grade 4). • Students used equivalent fractions to add fractions having unlike denominators (Unit 9).	• Students use representations to understand subtraction of fractions having unlike denominators.	• Students use equivalent fractions to subtract fractions having unlike denominators (Unit 9). • Students solve real-world and mathematical problems by writing and solving equations of the form $x + p = q$ and $px = q$ (Grade 6).

Rigor

Conceptual Understanding	Procedural Skill & Fluency	Application
• Students interpret representations to develop their understanding of subtracting fractions with unlike denominators.	• Students build proficiency through repeated use of representations, such as pictures, tools, and equations.	• Students explore subtraction of fractions in real-world contexts. *Application is not a targeted element of rigor for this standard.*

LESSON 9-5

Subtract Fractions with Unlike Denominato

Learning Targets

- I can subtract fractions with unlike denominators.
- I can explain how to subtract fractions with unlike denominators.

Standards ◇ Major ▲ Supporting ○ Additional

Content

◇ **5.NF.A** Use equivalent fractions as a strategy to add and subtract fractions.

◇ **5.NF.A.1** Add and subtract fractions with unlike denominators (including mixed numbers) by replacing given fractions with equivalent fractions in such a way as to produce an equivalent sum or difference of fractions with like denominators. $\left(\text{In general, } \frac{a}{b} + \frac{c}{d} = \frac{(ad + bc)}{bd}\right)$.

Math Practices and Processes

MPP Reason abstractly and quantitatively.

Focus

Content Objectives	Language Objectives	SEL Objective
• Students subtract fractions with unlike denominators. • Students explain how to subtract fractions with unlike denominators.	• Students explain how to subtract fractions with unlike denominators using *can* and *should*. • To support sense-making, ELs participate in MLR8: Discussion Supports.	• Students practice staying focused on a mathematical problem for a set time.

Coherence

Previous	Now	Next
• Students understood, recognized, and generated equivalent fractions (Grade 4). • Students used representations to understand subtraction of fractions having unlike denominators (Unit 9).	• Students use equivalent fractions to subtract fractions having unlike denominators.	• Students decompose addends to add mixed numbers (Unit 9). • Students solve real-world and mathematical problems by writing and solving equations of the form $x + p = q$ and $px = q$ (Grade 6).

Rigor

Conceptual Understanding	Procedural Skill & Fluency	Application
• Students extend on their basic understanding of operations with fractions.	• Students build proficiency with equivalent fractions and develop general skills and strategies for subtracting fractions.	• Students solve problems with real-world contexts. *Application is not a targeted element of rigor for this standard.*

LESSON 9-6

Add Mixed Numbers with Unlike Denominato

Learning Targets

- I can add mixed numbers with unlike denominators.
- I can explain how to add mixed numbers with unlike denominators.

Standards ◇ Major △ Supporting ○ Additional

Content

◇ **5.NF.A** Use equivalent fractions as a strategy to add and subtract fractions.

◇ **5.NF.A.1** Add and subtract fractions with unlike denominators (including mixed numbers) by replacing given fractions with equivalent fractions in such a way as to produce an equivalent sum or difference of fractions with like denominators. $\left(\text{In general, } \frac{a}{b} + \frac{c}{d} = \frac{(ad + bc)}{bd}\right)$.

Math Practices and Processes

MPP Look for and make use of structure.

Focus

Content Objectives	Language Objectives	SEL Objective
• Students add mixed numbers with unlike denominators. • Students explain how to add mixed numbers with unlike denominators.	• Students talk about adding mixed numbers with unlike denominators using *can* and *use*. • To support maximizing linguistic and cognitive meta-awareness, ELs participate in MLR5: Co-Craft Questions and Problems.	• Students identify multiple possible solutions for a given math problem.

Coherence

Previous	Now	Next
• Students understood, recognized, and generated equivalent fractions (Grade 4). • Students used equivalent fractions to subtract fractions having unlike denominators (Unit 9).	• Students decompose addends to add mixed numbers.	• Students decompose mixed numbers and use fractions greater than one to subtract mixed numbers (Unit 9). • Students solve real-world and mathematical problems by writing and solving equations of the form $x + p = q$ and $px = q$ (Grade 6).

Rigor

Conceptual Understanding	Procedural Skill & Fluency	Application
• Students build understanding of fraction concepts and addition of fractions and mixed numbers with unlike denominators.	• Students develop proficiency adding mixed numbers with unlike denominators and develop skills to handle a range of cases.	• Students solve problems with real-world contexts. *Application is not a targeted element of rigor for this standard.*

LESSON 9-7

Subtract Mixed Numbers with Unlike Denominators

Learning Targets

- I can subtract mixed numbers with unlike denominators.
- I can explain how to subtract mixed numbers with unlike denominators.

Standards ◇ Major ▲ Supporting ○ Additional

Content

◇ **5.NF.A** Use equivalent fractions as a strategy to add and subtract fractions.

◇ **5.NF.A.1** Add and subtract fractions with unlike denominators (including mixed numbers) by replacing given fractions with equivalent fractions in such a way as to produce an equivalent sum or difference of fractions with like denominators. (In general, $\frac{a}{b} + \frac{c}{d} = \frac{(ad + bc)}{bd}$.)

Math Practices and Processes

MPP Make sense of problems and persevere in solving them.

Focus

Content Objectives	Language Objectives	SEL Objective
• Students subtract mixed numbers with unlike denominators. • Students explain how to subtract mixed numbers with unlike denominators.	• Students talk about subtracting mixed numbers with unlike denominators using *can*, *should*, *same*, and *different*. • To support optimizing output, ELs participate in MLR7: Compare and Connect.	• Students practice segmenting a complex mathematical task into smaller achievable tasks.

Coherence

Previous	Now	Next
• Students understood, recognized, and generated equivalent fractions (Grade 4). • Students decomposed addends to add mixed numbers (Unit 9).	• Students decompose mixed numbers and use fractions greater than one to subtract mixed numbers.	• Students use regrouping to add and subtract mixed numbers (Unit 9). • Students solve real-world and mathematical problems by writing and solving equations of the form $x + p = q$ and $px = q$ (Grade 6).

Rigor

Conceptual Understanding	Procedural Skill & Fluency	Application
• Students interpret and use representations to develop their understanding of subtracting mixed numbers with unlike denominators.	• Students build proficiency through repeated use of representations, such as pictures, tools, and equations.	• Students solve problems with real-world contexts. *Application is not a targeted element of rigor for this standard.*

LESSON 9-8

Add and Subtract Mixed Numbers with Regrouping

Learning Target

- I can add and subtract mixed numbers with regrouping.

Standards ◆ Major ▲ Supporting ● Additional

Content

◇ **5.NF.A** Use equivalent fractions as a strategy to add and subtract fractions.

◇ **5.NF.A.1** Add and subtract fractions with unlike denominators (including mixed numbers) by replacing given fractions with equivalent fractions in such a way as to produce an equivalent sum or difference of fractions with like denominators. $\left(\text{In general, } \frac{a}{b} + \frac{c}{d} = \frac{(ad + bc)}{bd}\right)$.

Math Practices and Processes

MPP Look for and make use of structure.

Focus

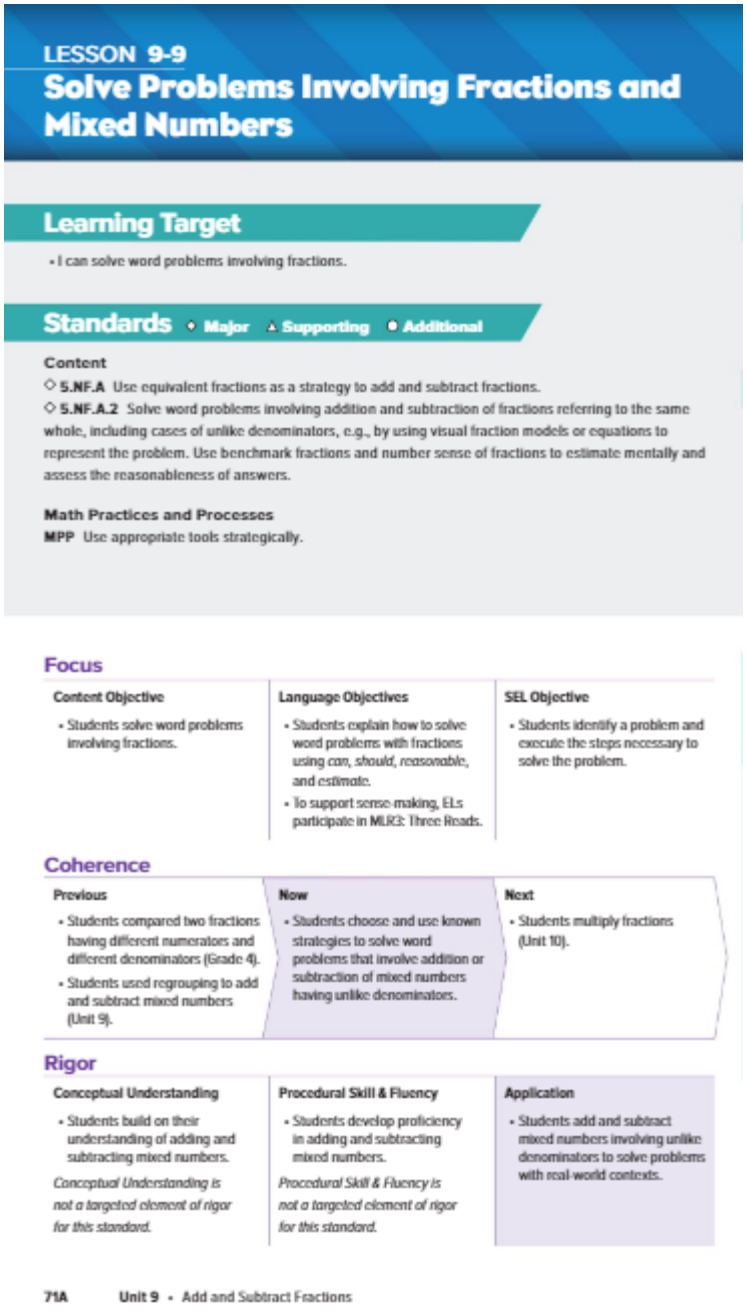
Content Objective	Language Objectives	SEL Objective
• Students add and subtract mixed numbers with regrouping.	• Students talk about adding and subtracting mixed numbers with regrouping using *rearrange* and *rename*. • To support optimizing output, ELs participate in MLR1: Stronger and Clearer Each Time.	• Students work toward completing a mathematical task independently using prior knowledge or understanding of mathematical concepts.

Coherence

Previous	Now	Next
• Students understood, recognized, and generated equivalent fractions (Grade 4). • Students decomposed mixed numbers and used fractions greater than one to subtract mixed numbers (Unit 9).	• Students use regrouping to add and subtract mixed numbers.	• Students choose and use known strategies to solve word problems that involve addition or subtraction of mixed numbers having unlike denominators (Unit 9). • Students solve real-world and mathematical problems by writing and solving equations of the form $x + p = q$ and $px = q$ (Grade 6).

Rigor

Conceptual Understanding	Procedural Skill & Fluency	Application
• Students build understanding of fraction concepts to add and subtract mixed numbers with unlike denominators.	• Students develop proficiency in adding and subtracting mixed numbers for an increased range of cases.	• Students solve problems with real-world contexts. *Application is not a targeted element of rigor for this standard.*



LESSON 9-9

Solve Problems Involving Fractions and Mixed Numbers

Learning Target

- I can solve word problems involving fractions.

Standards ◆ Major ▲ Supporting ● Additional

Content

◇ **5.NF.A** Use equivalent fractions as a strategy to add and subtract fractions.

◇ **5.NF.A.2** Solve word problems involving addition and subtraction of fractions referring to the same whole, including cases of unlike denominators, e.g., by using visual fraction models or equations to represent the problem. Use benchmark fractions and number sense of fractions to estimate mentally and assess the reasonableness of answers.

Math Practices and Processes

MPP Use appropriate tools strategically.

Focus

Content Objective	Language Objectives	SEL Objective
• Students solve word problems involving fractions.	• Students explain how to solve word problems with fractions using *can, should, reasonable,* and *estimate.* • To support sense-making, ELs participate in MLR3: Three Reads.	• Students identify a problem and execute the steps necessary to solve the problem.

Coherence

Previous	Now	Next
• Students compared two fractions having different numerators and different denominators (Grade 4). • Students used regrouping to add and subtract mixed numbers (Unit 9).	• Students choose and use known strategies to solve word problems that involve addition or subtraction of mixed numbers having unlike denominators.	• Students multiply fractions (Unit 10).

Rigor

Conceptual Understanding	Procedural Skill & Fluency	Application
• Students build on their understanding of adding and subtracting mixed numbers. *Conceptual Understanding is not a targeted element of rigor for this standard.*	• Students develop proficiency in adding and subtracting mixed numbers. *Procedural Skill & Fluency is not a targeted element of rigor for this standard.*	• Students add and subtract mixed numbers involving unlike denominators to solve problems with real-world contexts.

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.NF.A.1	Add and subtract fractions with unlike denominators (including mixed numbers) by replacing given fractions with equivalent fractions in such a way as to produce an equivalent sum or difference of fractions with like denominators.
5.NF.A.2	Solve word problems involving addition and subtraction of fractions referring to the same whole, including cases of unlike denominators, e.g., by using visual fraction models or equations to represent the problem. Use benchmark fractions and number sense of fractions to estimate mentally and assess the reasonableness of answers.