Unit 12 Reveal Grade 3

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

Unit Overview

UNIT 12 PLANNER
Measurement and Data

PACING: 17 days

LESSON		MATH OBJECTIVE	LANGUAGE OBJECTIVE	SOCIAL AND EMOTIONAL LEARNING OBJECTIVE	LESSON	KEY VOCABULARY
Unit Opener IGNITE! Comparing Buildings Students explore different ways to measure and compare the heights of buildings.						
12-1	Measure Liquid Volume	Students measure liquid volume in milliliters and liters.	Students express a precise measurement of liquid by using *liters* and *milliliters*.	Students discuss and practice strategies for managing stressful situations.	12-1	**Math Terms** liquid volume liter (L) milliliter (mL)
12-2	Estimate and Solve Problems with Liquid Volume	Students estimate liquid volumes in milliliters and liters. Students solve word problems involving liquid volume.	Students use the word *about* to give an estimate of liquid volume.	Students recognize personal strengths through thoughtful self-reflection.	12-2	estimate liquid volume liter (L) milliliter (mL)
12-3	Measure Mass	Students measure mass in grams and kilograms.	Students introduce a solution to a word problem using *so*.	Students recognize and work to understand the emotions of others and practice empathetic responses.	12-3	balance scale gram (g) kilogram (kg) mass
12-4	Estimate and Solve Problems with Mass	Students estimate mass in grams and kilograms. Students solve word problems involving mass.	Students articulate a conclusion about the mass of an object using *so*.	Students set a focused mathematical goal and make a plan for achieving that goal.	12-4	gram (g) kilogram (kg) mass
12-5	Tell Time to the Nearest Minute	Students tell and write time to the nearest minute.	Students tell time on an analog clock using the terms *before* and *past*.	Students collaborate with peers to complete a mathematical task and offer constructive feedback to the mathematical ideas posed by others.	12-5	analog clock digital clock
12-6	Solve Problems Involving Time	Students solve word problems involving time intervals.	Students express times shown on an analog clock by using hours and exact minutes.	Students discuss how a rule or routine can help develop mathematical skills and knowledge and be responsible contributors.	12-6	number line
12-7	Understand Scaled Picture Graphs	Students create scaled picture graphs.	Students describe the scale of a picture graph by using the verb *represents*.	Students exchange ideas for mathematical problem-solving with a peer, listening attentively and providing thoughtful and constructive feedback.	12-7	key picture graph scale
12-8	Understand Scaled Bar Graphs	Students create scaled bar graphs.	Students express the values used to scale a graph by using the term *each*.	Students set learning goals and initiate work on tasks to accomplish their goals.	12-8	bar graph scale
12-9	Solve Problems Involving Scaled Graphs	Students solve problems using scaled graphs.	Students interpret data on a bar graph by using the expression *more than*.	Students identify a problem, use creativity to execute problem-solving steps, and identify multiple solutions.	12-9	bar graph picture graph
12-10	Measure to Halves or Fourths of an Inch	Students measure objects to the nearest half and quarter inch.	Students articulate two possible measurements, one estimated and one precise, by using *or*.	Students identify personal traits that make them good students, peers, and math learners.	12-10	ruler
Math Probe Measuring Length Students find the length of a line segment and determine whether statements about the measurement are true or false.						
12-11	Show Measurement Data on a Line Plot	Students generate measurement data and create line plots to display the data.	Students describe a tally on a line plot by using the expression *the number of*.	Students collaborate with peers and contribute to group effort to achieve a collective mathematical goal.	12-11	line plot
Unit Review **Fluency Practice**						
Performance Task **Unit Assessment**						

Enduring Understandings

See Above

Essential Questions

See Above

Instructional Strategies and Learning Activities

LESSON 12-1

Measure Liquid Volume

Learning Targets

- I can measure liquid volume in milliliters and liters.
- I can explain how to measure liquid volume in milliliters and liters.

Standards   • Major   △ Supporting   ○ Additional

Content

◇ **3.MD.A.2** Measure and estimate liquid volumes and masses of objects using standard units of grams (g), kilograms (kg), and liters (l). Add, subtract, multiply, or divide to solve one-step word problems involving masses or volumes that are given in the same units, e.g., by using drawings (such as a beaker with a measurement scale) to represent the problem.

Math Practices and Processes

MPP Use appropriate tools strategically.

Focus

Content Objective	Language Objectives	SEL Objective
• Students measure liquid volume in milliliters and liters.	• Students express a precise measurement of liquid by using liters and millimeters. • To cultivate conversation, use MLR8: Discussion Supports.	• Students discuss and practice strategies for managing stressful situations.

Coherence

Previous	Now	Next
• Students measured the length of objects using units of inches, feet, centimeters, and meters (Grade 2).	• Students apply an understanding of measurement to measure liquid volume..	• Students estimate liquid volumes in milliliters and liters (Unit 12). • Students solve word problems involving liquid volumes and the four operations (Grade 4).

Rigor

Conceptual Understanding	Procedural Skill & Fluency	Application
• Students develop an understanding of how to measure liquid volume.	• Students build fluency with liquid volume by measuring liquid volume in milliliters and liters.	• Students apply their understanding of liquid volume to compare measurements and solve real-world problems. *Application is not a targeted element of rigor for this standard.*

Estimate and Solve Problems with Liquid Volume

Learning Targets
- I can estimate liquid volume and solve problems involving liquid volume.
- I can explain how to estimate liquid volume and solve problems involving liquid volume.

Standards • Major ▲ Supporting ◇ Additional

Content

◇ **3.MD.A.2** Measure and estimate liquid volumes and masses of objects using standard units of grams (g), kilograms (kg), and liters (l). Add, subtract, multiply, or divide to solve one-step word problems involving masses or volumes that are given in the same units, e.g., by using drawings (such as a beaker with a measurement scale) to represent the problem.

Math Practices and Processes

MPP Model with mathematics.

Vocab[ulary]

Math Term[s]

estimate

liquid volum[e]

liter (L)

milliliter (mL[)]

Materi[als]

The material[s]
of the lesson[...]

- everyday [...]
  (1 L, 500 [mL...])
- metric me[...]
- water

Focus

Content Objectives	Language Objectives	SEL Objective
• Students estimate liquid volume in milliliters and liters.	• Students use the word *about* to give an estimate of liquid volume.	• Students recognize personal strengths through thoughtful self-reflection.
• Students solve word problems involving liquid volume.	• To support sense-making, use MLR6: Three Reads.	

Coherence

Previous	Now	Next
• Students used addition and subtraction to solve measurement problems (Grade 2).	• Students estimate liquid volume in liters and milliliters.	• Students estimate and solve problems involving mass (Unit 12).
• Students measured liquid volume (Unit 12).	• Students solve word problems involving liquid volume.	• Students convert larger units of measurement into smaller units (Grade 4).

Rigor

Conceptual Understanding	Procedural Skill & Fluency	Application
• Students build on their understanding of liquid volume to identify objects that can be used to estimate the liquid volume of other objects.	• Students use different strategies to estimate liquid volume.	• Students use all four operations to solve real-world problems involving liquid volume.

Learning Targets

- I can measure mass in grams and kilograms.
- I can explain how to measure mass in grams and kilograms.

Standards • Major ▲ Supporting ◇ Additional

Content

◇ **3.MD.A.2** Measure and estimate liquid volumes and masses of objects using standard units of grams (g), kilograms (kg), and liters (l). Add, subtract, multiply, or divide to solve one-step word problems involving masses or volumes that are given in the same units, e.g., by using drawings (such as a beaker with a measurement scale) to represent the problem.

Math Practices and Processes

MPP Reason abstractly and quantitatively.

Focus

Content Objective	Language Objectives	SEL Objective
• Students measure mass in grams and kilograms.	• Students introduce a solution to a word problem using so. • To cultivate conversation, use MLR5: Co-Craft Questions.	• Students recognize and work to understand the emotions of others and practice empathetic responses.

Coherence

Previous	Now	Next
• Students learned to measure lengths using metric units (Grade 2). • Students learned to solve problems with liquid volume in metric units (Unit 12).	• Students use a balance scale to measure mass in grams and kilograms. • Students explain how to solve problems with mass.	• Students use estimation to solve problems with mass (Unit 12). • Students relate metric units (Grade 4).

Rigor

Conceptual Understanding	Procedural Skill & Fluency	Application
• Students develop an understanding of mass as a measurable property.	• Students use a balance scale and metric units in grams and kilograms to find the mass of objects.	• Students apply what they have learned about measuring mass in grams and kilograms to solve real-world problems.

Estimate and Solve Problems with Mass

Learning Targets

- I can estimate mass and solve problems with mass.
- I can explain how to estimate mass and solve problems with mass.

Standards • Major ▲ Supporting ● Additional

Content

◇ **3.MD.A.2** Measure and estimate liquid volumes and masses of objects using standard units of grams (g), kilograms (kg), and liters (l). Add, subtract, multiply, or divide to solve one-step word problems involving masses or volumes that are given in the same units, e.g., by using drawings (such as a beaker with a measurement scale) to represent the problem.

Math Practices and Processes

MPP Use appropriate tools strategically.

Focus

Content Objectives	Language Objectives	SEL Objective
• Students estimate mass in grams and kilograms. • Students solve word problems involving mass.	• Students articulate a conclusion about the mass of an object using so. • To maximize linguistic and cognitive meta-awareness, use MLR2: Collect and Display.	• Students set a focused mathematical goal and make a plan for achieving that goal.

Coherence

Previous	Now	Next
• Students learned to measure lengths by using metric units (Grade 2). • Students learned to measure mass in grams and kilograms (Unit 12).	• Students use the mass of everyday items to estimate mass. • Students write equations and use strategies to solve word problems involving mass.	• Students use estimation to solve problems with time (Unit 12). • Students relate metric units (Grade 4).

Rigor

Conceptual Understanding	Procedural Skill & Fluency	Application
• Students develop an understanding of how to use the mass of everyday objects to estimate the mass of other objects.	• Students develop proficiency with estimating the mass of objects in grams and kilograms.	• Students apply what they have learned about estimating mass in grams and kilograms to solve real-world problems.

Tell Time to the Nearest Minute

Learning Targets

- I can tell time to the nearest minute.
- I can explain how to tell time to the nearest minute.

Standards   • Major   ▲ Supporting   ◍ Additional

Content

◇ **3.MD.A.1** Tell and write time to the nearest minute and measure time intervals in minutes. Solve word problems involving addition and subtraction of time intervals in minutes, e.g., by representing the problem on a number line diagram.

Math Practices and Processes

MPP Model with mathematics.

Focus

Content Objective	Language Objectives	SEL Objective
• Students tell and write time to the nearest minute.	• Students tell time on an analog clock by using the terms *before* and *past*. • To maximize linguistic and cognitive meta-awareness, use MLR8: Discussion Supports.	• 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 identified and wrote time in hours and half hours (Grade 1). • Students understood time to the nearest 5 minutes on analog and digital clocks (Grade 2).	• Students tell and write the time to the exact minute shown on analog and digital clocks.	• Students extend their understanding of clock reading to solve problems involving time intervals (Unit 12). • Students convert units of time, build understanding of elapsed time, and solve word problems involving intervals of time (Grade 4).

Rigor

Conceptual Understanding	Procedural Skill & Fluency	Application
• Students build on their understanding of telling time by examining and interpreting the time shown on analog and digital clocks to the nearest minute.	• Students strengthen their proficiency with clock reading by telling time to the nearest minute.	• Students apply their knowledge of telling time to the nearest minute to solve real-world problems.

Solve Problems Involving Time

Learning Targets

- I can solve problems involving time intervals.
- I can explain how to solve problems involving time intervals.

Standards • Major △ Supporting ○ Additional

Content

◇ **3.MD.A.1** Tell and write time to the nearest minute and measure time intervals in minutes. Solve word problems involving addition and subtraction of time intervals in minutes, e.g., by representing the problem on a number line diagram.

Math Practices and Processes

MPP Reason abstractly and quantitatively.
MPP Model with mathematics.

Focus

Content Objective	Language Objectives	SEL Objective
• Students solve word problems involving time intervals.	• Students express times shown on an analog clock by using hours and exact minutes. • To maximize linguistic and cognitive awareness, use MLR6: Three Reads.	• Students discuss how a rule or routine can help develop mathematical skills and knowledge and be responsible contributors.

Coherence

Previous	Now	Next
• Students explored telling time to the nearest 5 minutes (Grade 2). • Students practiced telling time to the nearest minute (Unit 12).	• Students solve problems involving time intervals.	• Students solve problems with time intervals by using all four operations (Grade 4).

Rigor

Conceptual Understanding	Procedural Skill & Fluency	Application
• Students understand that time can be measured in intervals.	• Students build fluency in working with time intervals, clock reading, and number lines.	• Students apply their understanding of telling time by solving contextual problems using various representations.

Understand Scaled Picture Graphs

Learning Targets

- I can interpret data in a scaled picture graph.
- I can draw a scaled picture graph to represent a data set.

Standards • Major ▲ Supporting ● Additional

Content

▲ **3.MD.B.3** Draw a scaled picture graph and a scaled bar graph to represent a data set with several categories. Solve one- and two-step "how many more" and "how many less" problems using information presented in scaled bar graphs. *For example, draw a bar graph in which each square in the bar graph might represent 5 pets.*

Math Practices and Processes

MPP Attend to precision.

Focus

Content Objective	Language Objectives	SEL Objective
• Students create scaled picture graphs.	• Students describe the scale of a picture graph by using the verb *represents*. • To support sense-making, use MLR4: Information Gap.	• Students exchange ideas for mathematical problem-solving with a peer, listening attentively and providing thoughtful and constructive feedback.

Coherence

Previous	Now	Next
• Students learned to understand picture graphs and bar graphs to represent data sets (Grade 2). • Students learned to multiply and divide fluently within 100 (Unit 9).	• Students create scaled picture graphs by using a scale to show a picture equal to more than one data point.	• Students solve problems involving scaled graphs (Unit 12). • Students solve problems involving data on a line plot (Grade 4).

Rigor

Conceptual Understanding	Procedural Skill & Fluency	Application
• Students build on their understanding of picture graphs by creating scaled picture graphs. *Conceptual understanding is not a targeted element of rigor for this standard.*	• Students develop proficiency interpreting and creating scaled picture graphs.	• Students apply what they have learned about scaled picture graphs to solve real-world problems.

Understand Scaled Bar Graphs

Learning Targets

- I can draw a scaled bar graph to represent a data set.
- I can describe how to draw a scaled bar graph to represent a data set.

Standards • Major ▲ Supporting ● Additional

Content

▲ **3.MD.B.3** Draw a scaled picture graph and a scaled bar graph to represent a data set with several categories. Solve one- and two-step "how many more" and "how many less" problems using information presented in scaled bar graphs. *For example, draw a scaled bar graph in which each square in the bar graph might represent 5 pets.*

Math Practices and Processes

MPP Reason abstractly and quantitatively.

Focus

Content Objective	Language Objectives	SEL Objective
• Students create scaled bar graphs.	• Students express the values used to scale a graph by using the term *each*. • To support sense-making, use MLR8: Discussion Supports.	• Students set learning goals and initiate work on tasks to accomplish their goals.

Coherence

Previous	Now	Next
• Students created and analyzed bar graphs with single-unit scales (Grade 2). • Students created and analyzed scaled picture graphs (Unit 12).	• Students draw and describe scaled bar graphs.	• Students solve problems involving scaled bar graphs (Unit 12). • Students display and interpret data on line plots (Grade 4).

Rigor

Conceptual Understanding	Procedural Skill & Fluency	Application
• Students understand how a scaled bar graph can represent a set of data. *Conceptual understanding is not a targeted element of rigor for this standard.*	• Students learn how to draw scaled bar graphs and determine an appropriate scale for their graphs.	• Students apply their understanding of scaled bar graphs to represent real-world data.

Solve Problems Involving Scaled Graphs

Learning Targets

- I can solve problems involving scaled graphs.
- I can explain how to solve problems involving scaled graphs.

Standards • Major ▲ Supporting ● Additional

Content

△ **3.MD.B.3** Draw a scaled picture graph and a scaled bar graph to represent a data set with several categories. Solve one- and two-step "how many more" and "how many less" problems using information presented in scaled bar graphs. *For example, draw a bar graph in which each square in the bar graph might represent 5 pets.*

Math Practices and Processes

MPP Attend to precision.

Focus

Content Objective	Language Objectives	SEL Objective
• Students solve problems using scaled graphs.	• Students interpret the data on a bar graph by using the expression *more than*. • To optimize output, use MLR3: Critique, Correct, and Clarify.	• Students identify a problem, use creativity to execute problem-solving steps, and identify multiple solutions.

Coherence

Previous	Now	Next
• Students solved problems involving picture graphs and bar graphs (Grade 2). • Students created and analyzed scaled picture graphs and scaled bar graphs (Unit 12).	• Students solve one- and two-step word problems involving scaled bar graphs and scaled picture graphs.	• Students generate data by measuring length to halves and fourths of an inch (Unit 12).

Rigor

Conceptual Understanding	Procedural Skill & Fluency	Application
• Students use an understanding of scaled graphs to help make sense of the relationship between the values given in real-world problems.	• Students build fluency in solving one- and two-step word problems involving scaled graphs. *Procedural skill and fluency is not a targeted element of rigor for this standard.*	• Students apply their knowledge of interpreting data sets using picture graphs and scaled bar graphs to solve one- and two-step real-world problems.

Measure to Halves or Fourths of an Inch

Learning Targets

- I can measure to the nearest half and fourth of an inch.
- I can explain how to measure to the nearest half and fourth of an inch.

Standards • Major △ Supporting ● Additional

Content

△ **3.MD.B.4** Generate measurement data by measuring lengths using rulers marked with halves and fourths of an inch. Show the data by making a line plot, where the horizontal scale is marked off in appropriate units—whole numbers, halves, or quarters.

Math Practices and Processes

MPP Attend to precision.

Focus

Content Objective	Language Objectives	SEL Objective
• Students measure objects to the nearest half and quarter inch.	• Students articulate two possible measurements, one estimated and one precise, by using or. • To support sense-making, use MLR7: Compare and Connect.	• Students identify personal traits that make them good students, peers, and math learners.

Coherence

Previous	Now	Next
• Students used rulers to measure the length of an object to the nearest inch (Grade 2). • Students represented fractions on a number line (Unit 7).	• Students use rulers to measure the length of an object to the nearest half or fourth of an inch.	• Students generate measurement data by measuring to the nearest half or fourth of an inch and represent the data on a line plot (Unit 12). • Students make a line plot to display a set of measurements to the nearest eighth, fourth, and half inch (Grade 4).

Rigor

Conceptual Understanding	Procedural Skill & Fluency	Application
• Students develop an understanding of length in fractions of a unit by relating it to their understanding of fractions on a number line.	• Students use a ruler to find the tick mark for a half or fourth of an inch that is closest to the end of an object.	• Students measure real-world objects to the nearest half or fourth of an inch. *Application is not a targeted element of rigor for this standard.*

Show Measurement Data on a Line Plot

Learning Targets

- I can generate and represent measurement data on a line plot.
- I can explain how to generate and represent measurement data on a line plot.

Standards • Major ▲ Supporting ● Additional

Content

▲ **3.MD.B.4** Generate measurement data by measuring lengths using rulers marked with halves and fourths of an inch. Show the data by making a line plot, where the horizontal scale is marked off in appropriate units—whole numbers, halves, or quarters.

Math Practices and Processes

MPP Model with mathematics.

Focus

Content Objective	Language Objectives	SEL Objective
• Students generate measurement data and create line plots to display the data.	• Students describe a tally on a line plot by using the expression *the number of*. • To maximize linguistic and cognitive awareness, use MLR6: Three Reads.	• Students collaborate with peers and contribute to group effort to achieve a collective mathematical goal.

Coherence

Previous	Now	Next
• Students used rulers to measure the length of objects to the nearest inch (Grade 2). • Students used rulers to measure the length to the nearest half and fourth of an inch (Unit 12).	• Students compile measurement data onto a line plot marked in halves or fourths of an inch.	• Students create line plots involving fractions to eighths and solve problems involving fractions (Grade 4).

Rigor

Conceptual Understanding	Procedural Skill & Fluency	Application
• Students extend their understanding of measurement by compiling data onto a line plot marked in halves or fourths of an inch.	• Students continue to develop fluency with measurement to fractions of an inch.	• Students apply their understanding of measurement to plot and analyze real-world data. *Application is not a targeted element of rigor for this standard.*

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.3.1	Ask and answer questions, and make relevant connections to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers.
LA.RI.3.2	Determine the main idea of a text; recount the key details and explain how they support the main idea.
LA.RI.3.3	Describe the relationship between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text, using language that pertains to time, sequence, and cause/effect.
LA.RI.3.4	Determine the meaning of general academic and domain-specific words and phrases in a text relevant to a grade 3 topic or subject area.
LA.RI.3.5	Use text features and search tools (e.g., key words, sidebars, hyperlinks) to locate information relevant to a given topic efficiently.
LA.RI.3.6	Distinguish their own point of view from that of the author of a text.

LA.RI.3.8	Describe the logical connection between particular sentences and paragraphs in a text (e.g., comparison, cause/effect, first/second/third in a sequence) to support specific points the author makes in a text.
LA.RI.3.9	Compare, contrast and reflect on (e.g., practical knowledge, historical/cultural context, and background knowledge) the most important points and key details presented in two texts on the same topic.
LA.RI.3.10	By the end of the year, read and comprehend literary nonfiction at grade level text-complexity or above, with scaffolding as needed.
LA.W.3.4	With guidance and support from adults, produce writing in which the development and organization are appropriate to task and purpose. (Grade-specific expectations for writing types are defined in standards 1–3 above.)
LA.SL.3.1	Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher led) with diverse partners on grade 3 topics and texts, building on others' ideas and expressing their own clearly.
LA.L.3.1	Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.

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**:

  o Content – the specific information that is to be taught in the lesson/unit/course of instruction.
  o Process – how the student will acquire the content information.
  o Product – how the student will demonstrate understanding of the content.
  o Learning Environment – the environment where learning is taking place including physical location and/or student grouping

  Differentiation occurring in this unit:

  Exit Ticket: Use Data
  to Inform Differentiation

  Every lesson closes with an Exit Ticket. Differentiation recommendations
  reside in the Teacher Edition to make the Exit Ticket data actionable.

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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.3.M.A.1	Tell and write time to the nearest minute and measure time intervals in minutes. Solve word problems involving addition and subtraction of time intervals in minutes, e.g., by representing the problem on a number line diagram.
MATH.3.M.A.2	Measure and estimate liquid volumes and masses of objects using standard units of grams (g), kilograms (kg), and liters (l). Add, subtract, multiply, or divide to solve one-step word problems involving masses or volumes that are given in the same units, e.g., by using drawings (such as a beaker with a measurement scale) to represent the problem.
MATH.3.DL.B.3	Draw a scaled picture graph and a scaled bar graph to represent a data set with several categories. Solve one- and two-step "how many more" and "how many less" problems using information presented in scaled bar graphs.
MATH.3.DL.B.4	Generate measurement data by measuring lengths using rulers marked with halves and fourths of an inch. Show the data by making a line plot, where the horizontal scale is marked off in appropriate units—whole numbers, halves, or quarters.