

Unit 7 Reveal Grade K


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

Unit Overview

UNIT 7 PLANNER

Understand Subtraction

PACING: 9 days

| LESSON | MATH OBJECTIVE | LANGUAGE OBJECTIVE | SOCIAL AND EMOTIONAL LEARNING OBJECTIVE | LESSON | KEY VOCABULARY |
|---|--|---|--|------------|---|
| Unit Opener  Shorter Trains Use subtraction to remove cars from a cube train. | | | | | |
| 7-1 | Represent Take Apart Problems Students represent take apart problems. | Students represent take apart problems using the phrasal verb <i>take apart</i> in the present continuous tense (<i>taking apart</i>). | Students break down a complex problem into manageable parts in order to solve. | 7-1 | Math Terms difference subtract |
| 7-2 | Represent and Solve Take From Problems Students represent and solve take from problems. | Students represent and solve "take from" subtraction word problems using <i>take from</i> in the present continuous (<i>taking from</i>). | Students demonstrate self-awareness of personal strengths and areas of challenge in mathematics. | 7-2 | difference minus subtract |
| 7-3 | Represent and Solve More Take From Problems Students represent subtraction word problems by taking from a number. | Students represent subtraction word problems by taking from a number using <i>minus</i> and the verb <i>equal</i> . | Students collaborate with peers to complete a mathematical task. | 7-3 | difference equation minus minus sign subtract |
| 7-4 | Represent and Solve Subtraction Problems Students represent and solve subtraction problems. | Students represent and solve subtraction problems using <i>can</i> . | Students practice behavioral flexibility while working with peers to complete a challenging mathematical task. | 7-4 | difference equation minus subtract |
| 7-5 | Represent and Solve Addition and Subtraction Problems Students solve take from and put together/take apart problems. | Students explain how to solve take from and put together/take apart problems using <i>solved</i> . | Students identify the information that is needed or most useful in order to complete a mathematical task. | 7-5 | add equation subtract |
| Math Probe Representing Addition and Subtraction Use materials to model addition and subtraction problems. | | | | | |
| Unit Review | | | | | |
| Fluency Practice | | | | | |
| Unit Assessment | | | | | |
| Performance Task | | | | | |

Enduring Understandings

See Above

Essential Questions

Instructional Strategies and Learning Activities

LESSON 7-1

Represent Take Apart Problems

Learning Targets

- I can represent take apart problems.
- I can explain how to represent take apart problems.

Standards

Content

- ◇ **K.OA.A** Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.
- ◇ **K.OA.A.1** Represent addition and subtraction with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations.

Math Practices and Processes

MPP Model with mathematics.

Focus

| Content Objective | Language Objectives | SEL Objective |
|---|---|--|
| <ul style="list-style-type: none"> • Students represent take apart problems. | <ul style="list-style-type: none"> • Students represent take apart problems using the phrasal verb <i>take apart</i> in the present continuous tense (<i>taking apart</i>). • Supporting sense-making and optimizing output, by participating in MLR: Critique, Correct, and Clarify. | <ul style="list-style-type: none"> • Students break down a complex problem into manageable parts in order to solve. |

Coherence

| Previous | Now | Next |
|---|---|---|
| <ul style="list-style-type: none"> • Students learned to represent and solve addition problems (Unit 6). | <ul style="list-style-type: none"> • Students represent subtraction by taking apart groups of objects. | <ul style="list-style-type: none"> • Students represent and solve subtraction word problems (Unit 7). • Students learn subtraction strategies to build fluency (Grade 1). |

Rigor

| Conceptual Understanding | Procedural Skill & Fluency | Application |
|---|---|--|
| <ul style="list-style-type: none"> • Students build understanding of the concept of breaking a quantity into two groups. | <ul style="list-style-type: none"> • Students practice strategies for solving take apart problems, such as counting on fingers, acting out, or drawing a picture. <p><i>Procedural skill & fluency is not a targeted element of rigor for this standard.</i></p> | <ul style="list-style-type: none"> • Students apply their understanding of subtraction in a variety of real-world contexts. <p><i>Application is not a targeted element of rigor for this standard.</i></p> |

LESSON 7-2

Represent and Solve Take From Problems

Learning Targets

- I can represent and solve take from problems.
- I can explain how to represent and solve take from problems.

Standards

Major Supporting Additional

Content

- ◇ **K.OA.A** Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.
- ◇ **K.OA.A.1** Represent addition and subtraction with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations.

Math Practices and Processes

MPP Attend to precision.

Focus

| Content Objective | Language Objectives | SEL Objective |
|--|--|--|
| <ul style="list-style-type: none">• Students represent and solve take from problems. | <ul style="list-style-type: none">• Students represent and solve "take from" subtraction word problems using take from in the present continuous (taking from).• Supporting sense-making and optimizing output, by participating in MLRT: Stronger and Clearer Each Time. | <ul style="list-style-type: none">• Students demonstrate self-awareness of personal strengths and areas of challenge in mathematics. |

Coherence

| Previous | Now | Next |
|--|--|--|
| <ul style="list-style-type: none">• Students counted and represented numbers to 10 (Unit 3).• Students represented and solved take apart problems (Unit 7). | <ul style="list-style-type: none">• Students apply their understanding of subtraction to represent and solve take from problems. | <ul style="list-style-type: none">• Students learn subtraction strategies to build fluency (Grade 1).• Students represent and solve more take from problems (Unit 7). |

Rigor

| Conceptual Understanding | Procedural Skill & Fluency | Application |
|---|---|--|
| <ul style="list-style-type: none">• Students build understanding of subtraction as taking away a quantity from a given quantity.• They understand that the result is the quantity remaining after taking away the specified quantity. <p><i>Conceptual understanding is not a targeted element of rigor for this standard.</i></p> | <ul style="list-style-type: none">• Students continue to work with strategies for solving subtraction problems, such as counting on fingers, acting out, or drawing a picture. <p><i>Procedural skill & fluency is not a targeted element of rigor for this standard.</i></p> | <ul style="list-style-type: none">• Students continue to apply their understanding of subtraction in a variety of real-world contexts. |

LESSON 7-3

Represent and Solve More Take From Problems

Learning Targets

- I can represent and solve take from problems.
- I can explain how to represent and solve take from problems.

Standards • Major ▲ Supporting ● Additional

Content

- ◇ **K.OA.A** Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.
- ◇ **K.OA.A.2** Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem.

Math Practices and Processes

MPP Look for and express regularity in repeated reasoning.

Focus

| Content Objective | Language Objectives | SEL Objective |
|---|---|--|
| <ul style="list-style-type: none"> • Students represent subtraction word problems by taking from a number. | <ul style="list-style-type: none"> • Students represent subtraction word problems by taking from a number using <i>minus</i> and the <i>verb equal</i>. • Optimizing output by participating in MLRS: Critique, Correct, Clarify. | <ul style="list-style-type: none"> • Students collaborate with peers to complete a mathematical task. |

Coherence

| Previous | Now | Next |
|---|---|--|
| <ul style="list-style-type: none"> • Students solved addition word problems (Unit 6). • Students informally worked with subtraction by solving take from problems (Unit 7). | <ul style="list-style-type: none"> • Students apply their understanding of take from problems to represent and solve subtraction problems. | <ul style="list-style-type: none"> • Students represent and solve more subtraction word problems (Unit 7). • Students learn subtraction strategies to build fluency (Grade 1). |

Rigor

| Conceptual Understanding | Procedural Skill & Fluency | Application |
|---|---|--|
| <ul style="list-style-type: none"> • Students continue to develop their understanding of subtraction as taking away from a given quantity. | <ul style="list-style-type: none"> • Students use strategies for solving subtraction problems, such as counting on fingers, acting out, or drawing a picture. <p><i>Procedural skill & fluency is not a targeted element of rigor for this standard.</i></p> | <ul style="list-style-type: none"> • Students continue to apply their understanding of subtraction in a variety of real-world contexts. <p><i>Application is not a targeted element of rigor for this standard.</i></p> |

LESSON 7-4

Represent and Solve Subtraction Problems

Learning Targets

- I can represent and solve subtraction problems.
- I can explain how to represent and solve subtraction problems.

Standards

Major Supporting Additional

Content

- ◇ **K.OA.A** Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.
- ◇ **K.OA.A.1** Represent addition and subtraction with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations.
- ◇ **K.OA.A.2** Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem.

Math Practices and Processes

MPP Make sense of problems and persevere in solving them.

Focus

Content Objective

- Students represent and solve subtraction problems.

Language Objectives

- Students represent and solve subtraction problems using con.
- Support sense making and optimizing output, by participating in MLR2: Collect and Display.

SEL Objective

- Students practice behavioral flexibility while working with peers to complete a challenging mathematical task.

Coherence

Previous

- Students solved subtraction problems within 10. (Unit 7)

Now

- Students apply their understanding of subtraction to represent and solve problems.

Next

- Students will solve subtraction problems when the total, both parts, and one part is unknown (Grade 1)

Rigor

Conceptual Understanding

- Students build on their understanding of subtraction to mean taking apart a quantity into two quantities.

Conceptual understanding is not a targeted element of rigor for this standard.

Procedural Skill & Fluency

- Students begin to improve their subtraction fluency by identifying different ways to take apart a given quantity.

Procedural skill & fluency is not a targeted element of rigor for this standard.

Application

- Students begin to apply their understanding of subtraction in a variety of real-world contexts to show an answer to the question, *How can you take apart a group of a given quantity?*

LESSON 7-5

Represent and Solve Addition and Subtraction Problems

Learning Targets

- I can represent and solve addition and subtraction problems.
- I can explain how to represent and solve addition and subtraction problems.

Standards

Major Supporting Additional

Content

- ◇ **K.OA.A** Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.
- ◇ **K.OA.A.1** Represent addition and subtraction with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations.
- ◇ **K.OA.A.2** Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem.

Math Practices and Processes

- MPP** Construct viable arguments and critique the reasoning of others.

Focus

| Content Objective | Language Objectives | SEL Objective |
|--|---|---|
| <ul style="list-style-type: none"> • Students solve take from and put together/take apart problems. | <ul style="list-style-type: none"> • Students explain how to solve take from and put together/take apart problems using solved. • Support optimizing output, by participating in MLHS: Co-Craft Questions and Problems. | <ul style="list-style-type: none"> • Students identify the information that is needed or most useful in order to complete a mathematical task. |

Coherence

| Previous | Now | Next |
|---|---|--|
| <ul style="list-style-type: none"> • Students solved addition story problems and wrote equations to represent the problems (Unit 6). • Students solved subtraction story problems and wrote equations to represent the problems (Unit 7). | <ul style="list-style-type: none"> • Students apply their understanding of addition and subtraction to solve problems. | <ul style="list-style-type: none"> • Students will learn more addition and subtraction strategies to improve their fluency when solving story problems (Grade 1). |

Rigor

| Conceptual Understanding | Procedural Skill & Fluency | Application |
|---|--|--|
| <ul style="list-style-type: none"> • Students build on their understanding of addition and subtraction. <p><i>Conceptual understanding is not a targeted element of rigor for this standard.</i></p> | <ul style="list-style-type: none"> • Students develop proficiency with addition and subtraction. <p><i>Procedural skill & fluency is not a targeted element of rigor for this standard.</i></p> | <ul style="list-style-type: none"> • Students apply their understanding of subtraction and addition in real-world contexts. |

Integration of Career Readiness, Life Literacies and Key Skills

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| 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.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.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). |

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| 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

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| 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

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|-----------|---|
| LA.W.K.5 | With guidance and support from adults, strengthen writing through response and self-reflection using questions and suggestions from peers (e.g., adding details). |
| LA.RI.K | Reading Informational Text |
| LA.RI.K.1 | With prompting and support, ask and answer questions about key details in a text. |
| LA.RI.K.2 | With prompting and support, identify the main topic and retell key details of a text. |
| LA.RI.K.3 | With prompting and support, describe the connection between two individuals, events, ideas, or pieces of information in a text. |
| LA.RI.K.4 | With prompting and support, ask and answer questions about unknown words in a text. |
| LA.RI.K.7 | With prompting and support, describe the relationship between illustrations and the text in which they appear (e.g., what person, place, thing, or idea in the text an illustration depicts). |

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|------------|--|
| LA.RI.K.8 | With prompting and support, identify the reasons an author gives to support points in a text. |
| LA.RI.K.10 | Actively engage in group reading activities with purpose and understanding. |
| LA.RL.K.4 | Ask and answer questions about unknown words in a text. |
| LA.SL.K | Speaking and Listening |
| LA.SL.K.1 | Participate in collaborative conversations with diverse partners about kindergarten topics and texts with peers and adults in small and larger groups. |
| LA.SL.K.2 | Confirm understanding of a text read aloud or information presented orally or through other media by asking and answering questions about key details and requesting clarification if something is not understood. |
| LA.SL.K.3 | Ask and answer questions in order to seek help, get information, or clarify something that is not understood. |

Differentiation

- Understand that gifted students, just like all students, come to school to learn and be challenged.
- Pre-assess your students. Find out their areas of strength as well as those areas you may need to address before students move on.
- Consider grouping gifted students together for at least part of the school day.
- Plan for differentiation. Consider pre-assessments, extension activities, and compacting the curriculum.
- Use phrases like "You've shown you don't need more practice" or "You need more practice" instead of words like "qualify" or "eligible" when referring to extension work.
- Encourage high-ability students to take on challenges. Because they're often used to getting good grades, gifted students may be risk averse.
- **Definitions of Differentiation Components:**
 - Content – the specific information that is to be taught in the lesson/unit/course of instruction.
 - Process – how the student will acquire the content information.
 - Product – how the student will demonstrate understanding of the content.
 - Learning Environment – the environment where learning is taking place including physical location and/or student grouping

Differentiation occurring in this unit:

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 ACCOMMODATIONS spreadsheet in this discipline.

Modifications and Accommodations used in this unit:

Benchmark Assessments

Benchmark Assessments are given periodically (e.g., at the end of every quarter or as frequently as once per month) throughout a school year to establish baseline achievement data and measure progress toward a standard or set of academic standards and goals.

Schoolwide Benchmark assessments:

Aimsweb benchmarks 3X a year

Linkit Benchmarks 3X a year

DRA

Additional Benchmarks used in this unit:

Reveal Unit assessments

Formative Assessments

Assessment allows both instructor and student to monitor progress towards achieving learning objectives, and can be approached in a variety of ways. **Formative assessment** refers to tools that identify misconceptions, struggles, and learning gaps along the way and assess how to close those gaps. It includes effective tools for helping to shape learning, and can even bolster students' abilities to take ownership of their learning when they understand that the goal is to improve learning, not apply final marks (Trumbull and Lash, 2013). It can include students assessing themselves, peers, or even the instructor, through writing, quizzes, conversation, and more. In short, formative assessment occurs throughout a class or course, and seeks to improve student achievement of learning objectives through approaches that can support specific student needs (Theal and Franklin, 2010, p. 151).

Formative Assessments used in this unit:

Teacher observation

Checklists

Questioning and Discussion

Quizzes

Summative Assessments

summative assessments evaluate student learning, knowledge, proficiency, or success at the conclusion of an instructional period, like a unit, course, or program. Summative assessments are almost always formally graded and often heavily weighted (though they do not need to be). Summative assessment can be used to great effect in conjunction and alignment with formative assessment, and instructors can consider a variety of ways to combine these approaches.

Summative assessments for this unit:

End of Unit assessments

Instructional Materials

See above

Standards

| | |
|-------------|--|
| MA.K.OA.A | Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from. |
| MA.K.OA.A.1 | Represent addition and subtraction up to 10 with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations. |
| MA.K.OA.A.2 | Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem. |