# Unit 10 Reveal Grade 1

Content Area: **Math**
Course(s): **Math**
Time Period: **March**
Length: **1.5 weeks**
Status: **Published**

## Unit Overview

**UNIT 10 PLANNER**
**Compare Using Addition and Subtraction**

**PACING: 8 days**

| LESSON | MATH OBJECTIVE | LANGUAGE OBJECTIVE | SOCIAL AND EMOTIONAL LEARNING OBJECTIVE | LESSON | KEY VOCABULARY |
|---|---|---|---|---|---|
| **Unit Opener** IGNITE! **Three Numbers in Order** Explore a pattern when working with sums based on three consecutive numbers. | | | | | |
| **10-1 Represent and Solve Compare Problems** | Students represent and solve a compare situation when the difference is unknown. | Students describe the solutions of comparison situations with the difference unknown using simple present tense verbs. | Students collaborate with peers to complete a mathematical task and offer constructive feedback to the mathematical ideas posed by others. | **10-1** | **Math Terms** addend compare difference equation unknown word problem |
| **10-2 Represent and Solve Compare Problems Using Addition** | Students represent and solve a compare situation when the greater quantity is unknown. | Students use present tense in greater number unknown comparison problems. | Students develop and execute a plan, including selecting tools for mathematical problem solving. | **10-2** | addend compare equation sum unknown word problem |
| **Math Probe** Showing Addition and Subtraction Choose an addition or subtraction equation for the situation and show why. | | | | | |
| **10-3 Represent and Solve More Compare Problems** | Students represent and solve a compare situation when the lesser quantity is unknown. | Students use more and fewer to describe comparison situations with the lesser number unknown. | Students explore taking different perspectives on approaches to problem solving. | **10-3** | addend compare difference equation sum unknown word problem |
| **10-4 Solve Compare Problems Using Addition and Subtraction** | Students represent and solve various compare problems. | Students use or to describe comparison situations with addition or subtraction. | Students identify personal traits that make them good students, peers, and math learners. | **10-4** | addend compare difference equation sum unknown word problem |
| **Unit Review** **Fluency Practice** | | | | | |
| **Unit Assessment** **Performance Task** | | | | | |

## Enduring Understandings

See Above

## Essential Questions

See Above

## Instructional Strategies and Learning Activities



LESSON 10-1

# Represent and Solve Compare Problems

## Learning Targets

- I can solve compare problems with the difference unknown using addition or subtraction equations.
- I can explain how to solve compare problems with the difference unknown.

## Standards • Major △ Supporting ⊙ Additional

**Content**

◇ **1.OA.A.1** Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.

**Math Practices and Processes**

**MPP** Reason abstractly and quantitatively.

**MPP** Make sense of problems and persevere in solving them.

### Focus

| Content Objective | Language Objectives | SEL Objective |
|---|---|---|
| • Students represent and solve a compare situation when the difference is unknown. | • Students describe the solutions of comparison situations with the difference unknown using simple present tense verbs. <br> • To optimize output, ELs participate in MLR4: Information Gap. | • 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 solved addition word problems (Grade K). <br> • Students added within 100 (Unit 9). | • Students represent comparison word problems in which the difference is unknown and solve the problems using their representation. | • Students represent and solve various compare problems (Unit 10). <br> • Students solve addition and subtraction word problems (Grade 2). |

### Rigor

| Conceptual Understanding | Procedural Skill & Fluency | Application |
|---|---|---|
| • Students develop conceptual understanding that quantities can be compared to solve word problems. <br> *Conceptual understanding is not a targeted element of rigor for this standard.* | • Students model and solve word problems in which a comparison is made. <br> *Procedural skill & fluency is not a targeted element of rigor for this standard.* | • Students apply their knowledge of comparing two quantities to solve real-world problems. |

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# Represent and Solve Compare Problems Using Addition

## Learning Targets

- I can solve compare problems with the greater quantity unknown using addition equations.
- I can explain how to solve compare problems with the greater quantity unknown.

## Standards • Major ▲ Supporting ● Additional

**Content**

◇ **1.OA.A.1** Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.

**Math Practices and Processes**

**MPP** Reason abstractly and quantitatively.

**MPP** Look for and make use of structure.

## Focus

| Content Objective | Language Objectives | SEL Objective |
|---|---|---|
| • Students represent and solve a compare situation when the greater quantity is unknown. | • Students use present tense in greater number unknown comparison problems.<br>• To support sense-making, ELs participate in MLR2: Collect and Display. | • Students develop and execute a plan, including selecting tools for mathematical problem solving. |

## Coherence

| Previous | Now | Next |
|---|---|---|
| • Students solved addition word problems (Grade K).<br>• Students represented and solved comparison situations with an unknown difference (Unit 10). | • Students represent comparison word problems in which the greater number is unknown and solve the problems using their representation. | • Students represent and solve comparison situations with the lesser number unknown (Unit 10).<br>• Students solve addition and subtraction word problems (Grade 2). |

## Rigor

| Conceptual Understanding | Procedural Skill & Fluency | Application |
|---|---|---|
| • Students develop conceptual understanding that knowing the lesser quantity in comparison word problems helps solve them.<br><br>*Conceptual understanding is not a targeted element of rigor for this standard.* | • Students model and solve comparison word problems in which the greater quantity is unknown.<br><br>*Procedural skill & fluency is not a targeted element of rigor for this standard.* | • Students apply their knowledge of solving real-world comparison problems when the greater quantity is unknown. |

# Represent and Solve More Compare Problems

## Learning Targets

- I can solve compare problems with the lesser quantity unknown using addition or subtraction equations.
- I can explain how to solve compare problems with the lesser quantity unknown.

## Standards  ◆ Major  ▲ Supporting  ● Additional

**Content**

◇ **1.OA.A.1** Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.

**Math Practices and Processes**

**MPP** Reason abstractly and quantitatively.

**MPP** Attend to precision.

## Focus

| Content Objective | Language Objectives | SEL Objective |
|---|---|---|
| • Students represent and solve a compare situation when the lesser quantity is unknown. | • Students use *more* and *fewer* to describe comparison situations with the lesser number unknown.<br>• To cultivate conversation, ELs participate in MLR5: Co-Craft Questions and Problems. | • Students explore taking different perspectives on approaches to problem solving. |

## Coherence

| Previous | Now | Next |
|---|---|---|
| • Students solved addition word problems (Grade K).<br>• Students represented and solved comparison situations with the greater quantity unknown (Unit 10). | • Students represent comparison word problems in which the lesser number is unknown and solve the problems using their representation. | • Students represent and solve various comparison situations (Unit 10).<br>• Students solve addition and subtraction word problems (Grade 2). |

## Rigor

| Conceptual Understanding | Procedural Skill & Fluency | Application |
|---|---|---|
| • Students develop conceptual understanding that knowing the greater quantity in comparison word problems can be helpful to solve the word problems.<br><br>*Conceptual understanding is not a targeted element of rigor for this standard.* | • Students model and solve comparison word problems in which the lesser quantity is unknown.<br><br>*Procedural skill & fluency is not a targeted element of rigor for this standard.* | • Students apply their knowledge of solving real-world comparison problems when the lesser quantity is unknown. |

# Solve Compare Problems Using Addition and Subtraction

## Learning Targets

- I can solve compare problems using addition or subtraction equations.
- I can explain how to solve compare problems using addition or subtraction equations.

## Standards • Major ▲ Supporting ◆ Additional

**Content**

◇ **1.OA.A.1** Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.

**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 represent and solve various compare problems. | • Students use or to describe comparison situations with addition or subtraction.<br>• To maximize linguistic and cognitive meta-awareness, ELs participate in MLR8: Discussion Supports. | • Students identify personal traits that make them good students, peers, and math learners. |

## Coherence

| Previous | Now | Next |
|---|---|---|
| • Students solved addition word problems (Grade K).<br>• Students represented and solved comparison situations (Unit 10). | • Students analyze and solve different types of comparison situations with addition or subtraction. | • Students subtract within 100 (Unit 11).<br>• Students solve addition and subtraction word problems (Grade 2). |

## Rigor

| Conceptual Understanding | Procedural Skill & Fluency | Application |
|---|---|---|
| • Students develop conceptual understanding that knowing either the greater or lesser quantity in comparison word problems helps solve them.<br>*Conceptual understanding is not a targeted element of rigor for this standard.* | • Students model and solve comparison word problems in which either the greater or lesser quantity is unknown.<br>*Procedural skill & fluency is not a targeted element of rigor for this standard.* | • Students apply their knowledge of solving real world comparison problems when either the greater or lesser quantity is unknown. |

## Integration of Career Readiness, Life Literacies and Key Skills

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|---|---|
| PFL.9.1.2.CR.1 | Recognize ways to volunteer in the classroom, school and community. |
| 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.2 | Differentiate between financial wants and needs. |
| 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. |
| 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.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.7 | Describe actions peers can take to positively impact climate change (e.g., 6.3.2.CivicsPD.1). |
| TECH.9.4.2.TL.1 | Identify the basic features of a digital tool and explain the purpose of the tool (e.g., 8.2.2.ED.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.GCA.1 | Articulate the role of culture in everyday life by describing one's own culture and comparing it to the cultures of other individuals (e.g., 1.5.2.C2a, 7.1.NL.IPERS.5, 7.1.NL.IPERS.6). |
| TECH.9.4.2.IML.2 | Represent data in a visual format to tell a story about the data (e.g., 2.MD.D.10). |

## Technology and Design Integration

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| CS.K-2.8.1.2.AP.1 | Model daily processes by creating and following algorithms to complete tasks. |
| CS.K-2.8.1.2.AP.4 | Break down a task into a sequence of steps. |
| CS.K-2.8.1.2.CS.3 | Describe basic hardware and software problems using accurate terminology. |
| 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.2 | Store, copy, search, retrieve, modify, and delete data using a computing device. |
| 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-2.8.1.2.NI.1 | Model and describe how individuals use computers to connect to other individuals, places, information, and ideas through a network. |
| CS.K-2.8.1.2.NI.3 | Create a password that secures access to a device. Explain why it is important to create unique passwords that are not shared with others. |
| CS.K-2.8.2.2.EC.1 | Identify and compare technology used in different schools, communities, regions, and parts of the world. |
| CS.K-2.8.2.2.ED.2 | Collaborate to solve a simple problem, or to illustrate how to build a product using the design process. |
| CS.K-2.8.2.2.ED.3 | Select and use appropriate tools and materials to build a product using the design process. |

## Interdisciplinary Connections

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| LA.RI.1 | Reading Informational Text |
| | Key Ideas and Details |

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| LA.RI.1.1 | Ask and answer questions about key details in a text. |
| LA.RI.1.2 | Identify the main topic and retell key details of a text. |
| | Craft and Structure |
| LA.RI.1.4 | Ask and answer questions to help determine or clarify the meaning of words and phrases in a text. |
| LA.RI.1.5 | Know and use various text features (e.g., headings, tables of contents, glossaries, electronic menus, icons) to locate key facts or information in a text. |
| LA.RI.1.6 | Distinguish between information provided by pictures or other illustrations and information provided by the words in a text. |
| LA.RI.1.7 | Use the illustrations and details in a text to describe its key ideas. |
| LA.SL.1.1 | Participate in collaborative conversations with diverse partners about grade 1 topics and texts with peers and adults in small and larger groups. |
| LA.SL.1.1.B | Build on others' talk in conversations by responding to the comments of others through multiple exchanges. |
| LA.SL.1.1.C | Ask questions to clear up any confusion about the topics and texts under discussion. |
| LA.L.1.1 | 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:**

## 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:

## 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.

<u>**Summative assessments for this unit:**</u>

End of unit Assessments

## Instructional Materials

See Above

| | |
|---|---|
| MATH.1.OA.A.1 | Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem. |