



Unit 2 Addition and Subtraction Concepts Math 1

Last Update: August 1, 2026

Archdiocesan Curriculum > Grade > Math 1> Length of unit 28 to 30 days

Stage 1: Desired Results						
General Information This unit introduces students to basic addition and subtraction strategies using models, pictures, and number relationships. Students learn to solve problems by combining and separating quantities, compare amounts, and recognize patterns that make certain facts easier to solve. Emphasis is placed on conceptual understanding using visual models and real-world contexts. Mathematical Practices ● MP1 – Make sense of problems and persevere in solving them. ● MP2 – Reason abstractly and quantitatively. ● MP4 – Model with mathematics. ● MP5 – Use appropriate tools strategically. ● MP6 – Attend to precision.	Essential Question(s) ● How can pictures and models help us solve addition and subtraction problems? ● What strategies can we use to make addition and subtraction facts easier? ● How can we show different ways to make or take apart a number? ● How are addition and subtraction related? ● What do we learn about numbers when we add or subtract zero?					
	Enduring Understanding/Knowledge Students will: ● Use pictures to add. ● Model adding to a group. ● Model putting together. ● Solve addition problems by making a model. ● Add 0 to a number. ● Add addends within 10 in any order. ● Show all the ways to make a number. ● Explain why some addition facts are easy to add. Review/Assess ● Use pictures to solve subtraction problems. ● Model taking from a group. ● Model taking apart. ● Use a bar model to solve subtraction problems. ● Use pictures to compare and subtract. ● Use a bar model to compare and subtract. ● Identify how many are left when subtracting all or zero. ● Show all the ways to take apart a number. ● Explain why some subtraction facts are easy to subtract. Review/Assess	Vocabulary <table><tr><th>New</th><th>Review</th></tr><tr><td> ● addition equation ● plus (+) ● sum ● zero ● addends ● order ● difference ● minus (–) ● subtraction ● subtract ● compare ● fewer ● more </td><td> ● model ● picture ● group ● part ● whole ● take apart ● bar model ● fact family </td></tr></table>		New	Review	● addition equation ● plus (+) ● sum ● zero ● addends ● order ● difference ● minus (–) ● subtraction ● subtract ● compare ● fewer ● more
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Connections to Catholic Identity / Other Subjects Religion/Catholic Identity: ● Using themes from the Bible to create word problems to solve basic math facts. (ie- If there are 12 apostles and 4 leave to evangelize, how many are still with Jesus) ● The Psalms talk about the Blessings we receive from God- ask students to count their blessings and write about them	Differentiation Enrichment ● Create and Solve Word Problems – Have students write their own addition and subtraction stories and model them with pictures or equations. ● Explore Fact Families – Let students explore the relationship between addition and subtraction using fact family triangles. ● Use Number Sentences Creatively – Challenge					

Other Subject Here:

- **ELA:** Use trade books like Eric Carle's *The Hungry Caterpillar*- add up the fruits and other items from stories to find the sum.
- **Social Studies:** Demonstrate the concept of part/part/whole as it relates to communities. We are part of the whole school community. Citizens are part of towns and communities.

students to represent one equation in multiple ways (e.g., $3 + 4 = 7$, $4 + 3 = 7$).

- **Estimate and Justify** – Ask students to estimate a solution before solving and explain how they know if their answer is reasonable.

Support

- **Use Real Objects** – Provide manipulatives like counters or cubes to physically model adding and taking away.
- **Draw and Label** – Encourage students to draw and label pictures when solving problems.
- **Focus on One Operation** – Practice addition and subtraction separately before mixing the two.
- **Use Repetition with Patterns** – Reinforce patterns (e.g., adding 0, subtracting all) through chants, songs, or visuals.
- **Sentence Frames and Visual Aids** – Provide stems such as “___ plus ___ equals ___” or “If I take away ___, I have ___ left” with visual support.

Standards & Benchmarks

Addition Concepts:

1.OA.3

Apply properties of operations as strategies to add and subtract. For example: If $8 + 3 = 11$ is known, then $3 + 8 = 11$ is also known. (Commutative property of addition.) To add $2 + 6 + 4$, the second two numbers can be added to make a ten, so $2 + 6 + 4 = 2 + 10 = 12$. (Associative property of addition.) First grade students need not use formal terms for these properties.

1.OA.6.a

Use strategies such as counting on; making ten (for example, $8 + 6 = 8 + 2 + 4 = 10 + 4 = 14$); decomposing a number leading to a ten (for example, $13 - 4 = 13 - 3 - 1 = 10 - 1 = 9$); using the relationship between addition and subtraction (for example, knowing that $8 + 4 = 12$, one knows $12 - 8 = 4$); and creating equivalent but easier or known sums (for example, adding $6 + 7$ by creating the known equivalent $6 + 6 + 1 = 12 + 1 = 13$).

1.OA.8

Determine the unknown whole number in an addition or subtraction equation relating three whole numbers. For example, determine the unknown number that makes the equation true in each of the equations $8 + ? = 11$, $5 = ? - 3$, $6 + 6 = ?$

1.OA.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. For example, use objects, drawings, and equations with a symbol for the unknown number to represent the problem.

1.OA.A.1

Use addition and subtraction within 20 to solve word problems with unknowns in all positions (e.g., by using objects, drawings, and/or equations with a symbol for the unknown number to represent the problem).

1.OA.B.3

Apply properties of operations (commutative and associative properties of addition) as strategies to add and subtract within 20.

1.OA.AOB.1

Use estimation to determine the location of a number on a number line by reasoning about relationships to benchmark numbers (e.g. 10,50,100).

Subtraction Concepts:

1.OA.3

Apply properties of operations as strategies to add and subtract. For example: If $8 + 3 = 11$ is known, then $3 + 8 = 11$ is also known. (Commutative property of addition.) To add $2 + 6 + 4$, the second two numbers can be added to make a ten, so $2 + 6 + 4 = 2 + 10 = 12$. (Associative property of addition.) First grade students need not use formal terms for these properties.

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Teaching Ideas/Resources**Websites/Resources:**

- [Virtual Manipulatives](#) – Virtual manipulative resources that can be used for multiple units but has part/part/whole, number lines and ten frames which would be most helpful in this unit.
- [Polypad – Virtual Manipulatives](#) – Another virtual manipulative resource that offers digital number lines (including arrows for 'jumping') as well as cubes and number frames for representing problems.
- [Virtual Number Frame Manipulative](#) – Number Frames help students structure numbers to five, ten, twenty, and one hundred. Students use the frames to count, represent, compare, and compute with numbers in a particular range.
- [Ten Frame Worksheets](#) – Printable resources to practice addition facts using 10 frames.
- [Haunted House Fact Families](#) – This is a hands-on activity that uses fact families. Teacher and student directions are provided.