

**Using Common Core Standards to Enhance Classroom Instruction and Assessment**  
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**Addition and Subtraction**

**Kindergarten**

The student will recognize or recall specific vocabulary, such as:

- Add, addition, equation, explanation, expression, mental image, represent, subtract, subtraction, verbal, word problem.

The student will perform basic processes, such as:

- Recognize symbols such as +, - and =
- Represent addition and subtraction (for example, using objects, fingers, mental images, drawings, sounds, acting out, verbal explanations, expressions or equations. (K.OA.A.1)

The student will:

- Solve addition and subtraction word problems (K.OA.A.2)
- Solve addition and subtraction within 10 (K.OA.A.2)
- Fluently add and subtract within five (K.OA.A.5)

**First Grade**

The student will recognize or recall specific vocabulary, such as:

- Add, addition, count, decompose, digit, equal sign, equation, equivalent, false, model multiple, number, reasoning, relate, relationship, strategy, subtract, subtraction, sum, true, unknown, whole number, word problem

The student will perform basic processes, such as:

- Recognize symbols such as +, - and =
- Relate counting to addition and subtraction (for example, counting on by two to add two) 1.OA.C.5)
- Add and subtract within 20 (strategies may include using objects and drawings, counting on, making 10, decomposing a number leading to a 10, using the relationship between addition and subtraction, or creating equivalent but easier or known sums) (1.OA.C.6)
- Add and subtract fluently within 10 (1.OA.C.6)
- Understand the meaning of equal sign and determine if equations involving addition and subtraction are true or false (1.OA.D.7)
- Add a two-digit numbers to a one-digit number using concrete models. (1.NBT.C.4)
- Subtract multiples of 10 in the range of 10 to 90 using concrete models. (1.NBT.C.6)

The student will:

- Solve word problems involving addition and subtraction within 20, using objects, drawings and equations to represent the problem. (1.OA.A.1)
- Solve word problems involving addition of three whole numbers (sum less than or equal to 20) using objects, drawings and equations (1.OA.A.2)
- Determine the unknown whole number in an addition or subtraction equation relating three whole numbers (1.OA.D.8)
- Determine the unknown whole number in an addition or subtraction equation relating three whole numbers (1.OA.D.8)
- Add within 100, including adding a two-digit number to a one-digit number and adding a two digit number and a multiple of 10, and explain the strategies and reasoning used. (1.NBT.C.4)
- Subtract multiples of 10 in the range of 10 to 90 from multiples of 10 in the range of 10 to 90 and explain the strategies and reasoning used. (1.NBT.C.6)

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| <b>Second Grade</b> |  |
| ↓                   | <p>The student will recognize or recall specific vocabulary, such as:</p> <ul style="list-style-type: none"> <li>Add, addition, diagram, difference, digit, length, mental, model, number, number line, operation, place value, property, relationship, represent, strategy, subtract, subtraction, sum, unit, whole number, word problem</li> </ul> <p>The student will perform basic processes, such as:</p> <ul style="list-style-type: none"> <li>Fluently add and subtract within 20 using mental strategies (2.OA.B.2)</li> <li>Know from memory all sums of two one-digit numbers (2.OA.B.2)</li> <li>Fluently add and subtract within 100 (2.NBT.B.5)</li> <li>Add up to four two digit numbers based on strategies based on place value and properties of operations (2.NBT.B.6)</li> <li>Represent whole number sums and differences within 100 on a number line diagram (2.MD.B.6)</li> </ul> <p>The student will:</p> <ul style="list-style-type: none"> <li>Use addition and subtraction within 100 to solve one-or-two-step word problems including problems involving lengths that are given in the same units. (2.OA.A.1 and 2.MD.B.5)</li> <li>Add and subtract within 1,000, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction (2.NBT.B.7)</li> <li>Mentally add and subtract 10 or 100 to or from a given number between 100 and 900 (2.NBT.B.8)</li> <li>Explain why addition and subtraction strategies work, using place value and the properties of operations (2.NBT.B.9)</li> </ul> |
| <b>Third Grade</b>  |  |
| ↓                   | <p>The student will recognize or recall specific vocabulary, such as:</p> <ul style="list-style-type: none"> <li>Add, addition, algorithm, model, operation, place value, property, relationship, strategy, subtract, subtraction</li> </ul> <p>The student will perform basic processes, such as:</p> <ul style="list-style-type: none"> <li>Add and subtract within 1,000 using concrete models or drawings</li> </ul> <p>The student will:</p> <ul style="list-style-type: none"> <li>Fluently add and subtract within 1,000 using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction (3.NBT.A.2)</li> </ul>  |
| <b>Fourth Grade</b> |  |
| ↓                   | <p>The student will recognize or recall specific vocabulary, such as:</p> <ul style="list-style-type: none"> <li>Add, algorithm, digit, model, subtract, whole number</li> </ul> <p>The student will perform basic processes, such as:</p> <ul style="list-style-type: none"> <li>Add and subtract multidigit whole numbers using concrete models or drawings.</li> </ul> <p>The student will:</p> <ul style="list-style-type: none"> <li>Fluently add and subtract multidigit whole numbers using the standard algorithm (4.NBT.B.4)</li> </ul>   |