

## Grade 1 Math: Instructional Focus and Fluency

*Transitioning to the NYS Next Generation Math Learning Standards for Grades K-8, Effective September 2022*

Instructional Focus	Developmental Focus	Instructional Consideration (via Standards)
Develop an understanding of addition, subtraction, and strategies for addition and subtraction within 20.	<ul style="list-style-type: none"> <li>▶ Model using unit cubes, adding/counting on, put together/take apart, making tens</li> <li>▶ Understand the relationship between addition and subtraction               <ul style="list-style-type: none"> <li>▶ knowing that <math>8 + 4 = 12</math>, one knows <math>12 - 8 = 4</math></li> <li>▶ adding <math>6 + 7</math> by creating the known equivalent <math>6 + 6 + 1 = 12 + 1 = 13</math> (doubles plus 1)</li> <li>▶ subtract <math>10 - 8</math> by finding the number that makes 10 when added to 8</li> </ul> </li> </ul>	<p><b>NY-1.OA.3</b> Apply properties of operations as strategies to add and subtract.</p> <p><b>NY-1.OA.4</b> Understand subtraction as an unknown-addend problem within 20.</p> <p><b>NY-1.OA.5</b> Relate counting to addition and subtraction.</p> <p><b>NY-1.OA.6a</b> Add and subtract within 20. Use strategies such as: counting on, making ten, decomposing a number leading to a ten, using the relationship between addition and subtraction, creating equivalent but easier or known sums.</p>
Develop understanding of whole number relationships and place value, including grouping in tens and ones.	<ul style="list-style-type: none"> <li>▶ Comparing whole numbers (to 100)</li> <li>▶ Strategies to add within 100 and subtract multiples of 10</li> <li>▶ Place value - tens and ones</li> </ul>	<p><b>NY-1.NBT.3</b> Compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols <math>&gt;</math>, <math>=</math>, and <math>&lt;</math>.</p> <p><b>NY-1.NBT.4</b> Add within 100, including</p> <ul style="list-style-type: none"> <li>• a two-digit number and a one-digit number</li> <li>• a two-digit number and a multiple of 10.</li> </ul> <p><b>NY-1.NBT.6</b> Subtract multiples of 10 from multiples of 10 in the range 10-90 using</p> <ul style="list-style-type: none"> <li>• concrete models or drawings</li> <li>• strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.</li> </ul> <p>Relate the strategy used to a written representation and explain the reasoning.</p>

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Instructional Focus	Developmental Focus	Instructional Consideration (via Standards)
Develop understanding of linear measurement and measuring lengths as iterating length units.	<ul style="list-style-type: none"> <li>► Measure an object using unit cubes/compare object lengths</li> </ul>	<p><b>NY-1.MD.1</b> Order three objects by length; compare the lengths of two objects indirectly by using a third object.</p> <p><b>NY-1.MD.2</b> Order three objects by length; compare the lengths of two objects indirectly by using a third object.</p>

Fluency	Fluency development	Fluency Standard
Fluently add and subtract within 10.	<ul style="list-style-type: none"> <li>► Students can find sums and differences within 10 reasonably quickly, and say or write it. This involves a mixture of just knowing some answers, knowing some answers from patterns, and knowing some answers from the use of strategies.</li> </ul>	<p><b>NY-1.OA.6b</b> Fluently add and subtract within 10.</p>

**Note:** Fluency involves a mixture of just knowing some answers, knowing some answers from patterns, and knowing some answers from the use of strategies. Reaching fluency and knowing from memory (automaticity) of all single digit multiplication will take much of the year for many students. Fluently (procedural) adding and subtracting within 1,000 uses strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction.