

## Extended Content Standards Fourth Grade

### Standards for Mathematical Practice

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics.
5. Use appropriate tools strategically.
6. Attend to precision.
7. Look for and make use of structure.
8. Look for and express regularity in repeated reasoning.

*The Alternate Achievement Standards for Students With the Most Significant Cognitive Disabilities Non-Regulatory Guidance* states, "...materials should show a clear link to the content standards for the grade in which the student is enrolled, although the grade-level content may be reduced in complexity or modified to reflect pre-requisite skills. Throughout the Standards descriptors such as, describe, count, identify, etc., should be interpreted to mean that the students will be taught and tested according to their mode of communication.

### Operations and Algebraic Thinking

#### Standard

#### Represent and solve problems involving multiplication and division.

NC.4.OA.1	Demonstrate the connection between repeated addition and multiplication.( $2*3= 2+2+2$ ).
NC.4.OA.3	Solve one step word problem using addition or subtraction within 20.

**Gain familiarity with factors and multiples.**

**NC.4.OA.4** Show one way to arrive at a product.

**Explore patterns of numbers.**

**NC.4.OA.5** Use repeating patterns to make predictions.

**Number and Operations in Base Ten**

**Standard**

**Generalize place value understanding for multi-digit whole numbers.**

**NC.4.NBT.2** Use concrete and pictorial representations to count up to 100 items.

**NC.4.NBT.7** Round any whole number 0-30 to the nearest ten.

**Use place value understanding and properties of operations to perform multi-digit arithmetic.**

**NC.4.NBT.4** Add and subtract two-digit whole numbers.

**Number and Operations – Fractions**

**Standard**

**Extend understanding of fractions.**

**NC.4.NF.1** Identify models of one half (1/2) and one fourth (1/4).

<b>Use unit fractions to understand operations of fractions.</b>	
<b>NC.4.NF.3</b>	Represent one half as one of two parts to make 1 whole.
<b>Understand decimals.</b>	

<b>Measurement and Data</b>	
<b>Standard</b>	
<b>Solve problems involving measurement.</b>	
<b>NC.4.MD.1</b>	Identify the smaller measurement unit that comprises a larger unit within a measurement system (inches/foot, centimeter/meter, minutes/hour).
<b>NC.4.MD.3</b>	Determine the area of a square or rectangle by counting units of measure (unit squares).
<b>Represent and interpret data.</b>	
<b>Understand angles.</b>	
<b>NC.4.MD.6</b>	Identify angles in geometric shapes.

<b>Geometry</b>	
<b>Standard</b>	
<b>Classify shapes based on lines and angles in two-dimensional figures.</b>	
<b>NC.4.G.1</b>	Recognize parallel lines and intersecting lines.
<b>NC.4.G.2</b>	Describe the attributes of two dimensional shapes.

<b>NC.4.G.3</b>	Use lines of symmetry to partition shapes into equal areas.