

**Urbana School District #116**  
**THIRD GRADE CORE EXPECTATIONS**

**MATHEMATICS**

Illinois State Goal 6: Demonstrate and apply a knowledge and sense of numbers, including numeration and operations (addition, subtraction, multiplication, division), patterns, ratios and proportions.

State Standard	District Core Expectations
6A: Demonstrate knowledge and use of numbers and their representations in a broad range of theoretical and practical settings.	<ul style="list-style-type: none"> <li>Identify and write numbers up to 100,000</li> <li>Know place values up to 100,000</li> <li>Order and compare numbers up to 100,000</li> <li>Describe numbers and their characteristics (e.g., odd/even, factors/multiples)</li> <li>Find whole numbers and <math>\frac{1}{2}</math>s on a number line</li> <li>Identify and compare fractions</li> <li>Identify and compare decimals (tenths)</li> </ul>
6B: Investigate, represent and solve problems using number facts, operations (addition, subtraction, multiplication, division) and their properties, algorithms and relationships.	<ul style="list-style-type: none"> <li>Add and subtract 3 digit numbers with and without regrouping</li> <li>Know multiplication and division facts through 12</li> <li>Multiply and divide (up to 2 digit dividends)</li> <li>Use the relationship (fact families) between multiplication and division to solve problems.</li> </ul>
6C: Compute and estimate using mental mathematics, paper-and-pencil methods, calculators and computers.	<ul style="list-style-type: none"> <li>Round to the thousands place</li> <li>Solve a problem and write about how it was solved</li> </ul>
6D: Solve problems using comparison of quantities, ratios, proportions and percents.	

Illinois State Goal 7: Estimate, make and use measurements of objects, quantities and relationships and determine acceptable levels of accuracy.

State Standard	District Core Expectations
7A: Measure and compare quantities using appropriate units, instruments and methods.	<ul style="list-style-type: none"> <li>Solve problems involving simple elapsed time (e.g., hours, minutes, days)</li> <li>Measure with rulers, scales, containers, and thermometers</li> <li>Solve perimeter, area, and volume problems</li> </ul>
7B: Estimate measurements and determine acceptable levels of accuracy.	
7C: Select and use appropriate technology, instruments and formulas to solve problems, interpret results and communicate findings.	<ul style="list-style-type: none"> <li>Know measurement equivalences (for example: feet/ yards, ounces/ pounds, minutes/hour)</li> <li>Convert measurements</li> </ul>

Illinois State Goal 8: Use algebraic and analytical methods to identify and describe patterns and relationships in data, solve problems, and predict results.

State Standard	District Core Expectations
8A: Describe numerical relationships using variables and patterns.	<ul style="list-style-type: none"> <li>Find a missing number in a pattern</li> </ul>
8B: Interpret and describe numerical relationships using tables, graphs and symbols.	<ul style="list-style-type: none"> <li>Describe a pattern from a table of numbers</li> </ul>
8C: Solve problems using systems of numbers and their properties.	<ul style="list-style-type: none"> <li>Write a number sentence to describe a situation</li> </ul>
8D: Use algebraic concepts and procedures to represent and solve problems.	<ul style="list-style-type: none"> <li>Solve word problems with missing numbers (addition, subtraction, multiplication, division)</li> </ul>

Illinois State Goal 9: Use geometric methods to analyze, categorize and draw conclusions about points, lines, planes and space.

State Standard	District Core Expectations
9A: Demonstrate and apply geometric concepts involving points, lines, planes, and spaces.	<ul style="list-style-type: none"> <li>Describe and classify 2D shapes according to their characteristics (sides, angles, lines)</li> <li>Describe and classify 3D figures according to their characteristics (face, vertex, edge)</li> <li>Plot points on a grid</li> <li>Identify multiple lines of symmetry</li> <li>Describe paths of movement (slide, flip, turn)</li> <li>Identify lines, segments, rays, and parallel lines</li> </ul>
9B: Identify, describe, classify and compare relationships using points, lines, planes, and solids.	<ul style="list-style-type: none"> <li>Predict what happens when you put shapes together (composing) and take them apart (decomposing)</li> <li>Know the distance between two points on the number line</li> </ul>
9C: Construct convincing arguments and proofs to solve problems.	NA
9D: Use trigonometric ratios and circular functions to solve problems	NA

Illinois State Goal 10: Collect, organize and analyze data using statistical methods; predict results; and interpret uncertainty using concepts of probability.

State Standard	District Core Expectations
10A: Organize, describe and make predictions from existing data.	<ul style="list-style-type: none"> <li>Complete missing parts of a pictograph, bar graph, tally chart or table for a given set of data.</li> </ul>
10B: Formulate questions, design data collection methods, gather and analyze data and communicate findings.	<ul style="list-style-type: none"> <li>Find the mode for a set of numbers</li> </ul>
10C: Determine, describe and apply the probabilities of events.	<ul style="list-style-type: none"> <li>Describe probability using numbers, like 3 out of 4</li> </ul>

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