

Urbana School District #116
FIRST 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"> • Identify parts of a whole (1/2, 1/4) • Use objects to show ones, tens, and hundreds • Order and compare numbers to 100
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"> • Write numbers 0-100 • Count by 2s, 5s, 10s • Know when to add and subtract: <ul style="list-style-type: none"> - Addition & subtraction facts to 10 - Solve one step addition and subtraction problems with 1 or 2 digits - Writes number sentences • Identify coins: penny, nickel, dime, quarter
6C: Compute and estimate using mental mathematics, paper-and-pencil methods, calculators and computers.	<ul style="list-style-type: none"> • Estimate reasonable amounts
6D: Solve problems using comparison of quantities, ratios, proportions and percents.	NA

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"> • Use the right tool to measure things • Tell time to the hour • Tell the relationship between days and weeks
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"> • Measure using inches

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"> Describe and create patterns like AB, ABA, ABC
8B: Interpret and describe numerical relationships using tables, graphs and symbols.	
8C: Solve problems using systems of numbers and their properties.	
8D: Use algebraic concepts and procedures to represent and solve problems.	<ul style="list-style-type: none"> Solve problems with one number missing

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"> Identify and draw circle, square, triangle, oval, rectangle, rhombus, parallelogram Use words like above, below, on, under
9B: Identify, describe, classify and compare relationships using points, lines, planes, and solids.	<ul style="list-style-type: none"> Know that circles are related to spheres and squares are related to cubes
9C: Construct convincing arguments and proofs to solve problems.	NA
9D: Use trigonometric ratios and circular functions to solve problems	<ul style="list-style-type: none"> Application of standard 9D begins in middle school

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"> Read and make picture graphs and bar graphs
10B: Formulate questions, design data collection methods, gather and analyze data and communicate findings.	
10C: Determine, describe and apply the probabilities of events.	<ul style="list-style-type: none"> Tell when something is possible or impossible, likely or unlikely

Revised 7/06