

Urbana School District #116
EARLY CHILDHOOD CORE EXPECTATIONS

Please note: The following Core Expectations are in draft form and the curriculum committee will be updating them frequently.

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 numerals 0 – 5 Recognize “whole” and “part” Describe comparative relationships when using concrete objects Match numerals to the quantities they represent (0 – 5) using concrete objects
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"> Combine and separate two sets using concrete objects (0- 5) Count to 10 Use one-to-one correspondence Count with understanding and recognize “how many” in sets of objects
6C: Compute and estimate using mental mathematics, paper-and-pencil methods, calculators and computers.	<ul style="list-style-type: none"> Differentiate quantities using more, less, none, most, more than 0 - 5
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 comparative vocabulary (e.g., large/small, first/last, short/long)
7B: Estimate measurements and determine acceptable levels of accuracy.	<ul style="list-style-type: none"> Estimate and measure length, weight, and volume using nonstandard units

7C: Select and use appropriate technology, instruments and formulas to solve problems, interpret results and communicate findings.	<i>Under Construction</i>
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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"> Recognize, copy and extend a simple pattern (AB) using colors and shapes
8B: Interpret and describe numerical relationships using tables, graphs and symbols.	<ul style="list-style-type: none"> Sort and classify by characteristic, function, and category Order objects in series or rows
8C: Solve problems using systems of numbers and their properties.	NA
8D: Use algebraic concepts and procedures to represent and solve problems.	NA

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"> Recognize and name 2-D shapes: circle, triangle, and square Differentiate between straight and curved lines Identify 2-D geometric shapes in the environment (circle, triangle, square)
9B: Identify, describe, classify and compare relationships using points, lines, planes, and solids.	<ul style="list-style-type: none"> Find and name locations with concept words such as "near"
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"> • Interpret and compare data from a given graph and make predictions • Represent data using concrete objects, pictures, and graphs
10B: Formulate questions, design data collection methods, gather and analyze data and communicate findings.	<ul style="list-style-type: none"> • Gather data about self and surroundings
10C: Determine, describe and apply the probabilities of events.	<i>Under Construction</i>

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