

<u>Mathematics</u>	
Number Operations	
	<p>Understand numbers, ways of representing numbers, relationships among numbers, and number systems</p> <ul style="list-style-type: none"> ▪ Read, write and compare numbers <ul style="list-style-type: none"> ○ Rote count to 100 ○ Count by 10's to 100 ○ Count by 5's to 50 ○ Count by 2's to 10 ○ Count, recognize, represent, name and order numbers to 30 ○ Compare two or more sets (up to ten objects in each group) and identify which set is equal to, more than, or less than the other ○ Estimate the number of objects in a collection up to twenty with reasonable accuracy ▪ Understand that the next number in the counting sequence is one more than the number just named ▪ Compare and decompose numbers ▪ Connect number words (orally) and quantities they represent <p>Understand meanings of operations and how they relate to one another</p> <ul style="list-style-type: none"> ▪ Represent operations <ul style="list-style-type: none"> ○ Represent story/picture problems involving addition, subtraction, multiplication, or division for quantities under 10 with manipulative and/or drawings <p>Compute fluently and make reasonable estimates</p> <ul style="list-style-type: none"> ▪ Describe or represent mental strategies <ul style="list-style-type: none"> ○ Invent ways to represent addition and subtraction story problems using objects, pictures, and symbols ▪ Compute problems <ul style="list-style-type: none"> ○ Solve story/picture problems involving addition, subtraction, multiplication, or division for quantities under ten with manipulative and/or drawings

<p>Algebraic Relationships</p>	<p>Understand patterns, relations and functions</p> <ul style="list-style-type: none"> ▪ Recognize and extend patterns <ul style="list-style-type: none"> ○ Recognize or repeat sequences of sounds or shapes ▪ Create and analyze patterns <ul style="list-style-type: none"> ○ Identify, copy, extend, and create repeating patterns ▪ Classify objects and representations <ul style="list-style-type: none"> ○ Sort a collection of objects by a variety of attributes ○ Represent and analyze mathematical situations and structures using algebraic symbols <p>Represent mathematical situations</p> <ul style="list-style-type: none"> ○ With teacher assistance, represent a mathematical story/picture problem as an expression or number sentence <p>Use mathematical models to represent and understand quantitative relationships</p> <ul style="list-style-type: none"> ▪ Use mathematical models <ul style="list-style-type: none"> ○ Model situations that involve whole numbers, using pictures, objects, or symbols
<p>Geometric and Spatial Relationships</p>	<p>Analyze characteristics and properties of two- and three dimensional geometric shapes and develop mathematical arguments about geometric relationships</p> <ul style="list-style-type: none"> ▪ Describe and use geometric relationships <ul style="list-style-type: none"> ○ Sort two- and three-dimensional shapes by a variety of attributes ○ Recognize, sort, and name a minimum of the following basic shapes: square, triangle, circle, rectangle, cube, and cone <p>Specify locations and describe spatial relationships using coordinate geometry and other representational systems</p> <ul style="list-style-type: none"> ▪ Use coordinate systems <ul style="list-style-type: none"> ○ Describe, name, and interpret relative

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	<p>positions in space (above, below, front, behind)</p> <p>Use visualization, spatial reasoning and geometric modeling to solve problems</p> <ul style="list-style-type: none"> ▪ Recognize and draw three-dimensional representations <ul style="list-style-type: none"> ○ Identify shapes by their association with objects in the student’s environment
Measurement	
	<p>Understand measurable attributes of objects and the units, systems and processes of measurement</p> <ul style="list-style-type: none"> ▪ Determine unit of measurement <ul style="list-style-type: none"> ○ Compare and order objects according to their size or weight ▪ Tell and use units of time <ul style="list-style-type: none"> ○ Describe passage of time, using terms such as morning, afternoon, and evening; today, yesterday, and tomorrow ○ Name the days of the week ○ Use a calendar to tell the day and month ○ Tell time to the nearest hour ▪ Count and compute money ▪ Identify penny, nickel, and dime by name and value <p>Apply appropriate techniques, tools, and formulas to determine measurements</p> <ul style="list-style-type: none"> ▪ Use standard or nonstandard measurement <ul style="list-style-type: none"> ○ Compare lengths of similar objects (e.g., pieces of ribbon, yarn). Use the terms longer than, shorter than, and the same as ○ Use nonstandard units (unifix cubes, Popsicle sticks, paper clips, etc.) to measure length ○ Use a cup to compare the capacity of various containers. Use the terms holds more than, holds less than, holds the same amount
Data and Probability	
	<p>Formulate questions that can be addressed with data and collect, organize and display relevant data to answer them</p>

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	<ul style="list-style-type: none">▪ Formulate questions<ul style="list-style-type: none">○ Pose questions and gather data about themselves and their surroundings▪ Classify and organize data<ul style="list-style-type: none">○ Sort items according to their attributes▪ Represent and interpret data<ul style="list-style-type: none">○ Represent data using physical objects○ Tell what a two-column class graph is about and how many more one column has than the other○ Create a simple two-column real graph by sorting a small collection of objects and then graphing the result <p>Select and use appropriate statistical methods to analyze data</p> <ul style="list-style-type: none">▪ Describe and analyze data
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