

# Lake Mills School District

## Year at a Glance Scope and Sequence for Pupil Services

**Overarching Goal of the Curricular Area: Students will be able to effectively understand and apply healthy, social, emotional, behavioral, and academic skills in their lives.**

### Functional Academics – Math – Grade Band 3-4

Unit Theme	Unit Goal	Enduring Understandings for the Unit	Essential Questions for the Unit
<p>Mathematical Processes, Number Operations, and Relationships</p>	<p>Students will use ordering and rote counting up to 20.</p> <p>Students will identify and sort coins into like groups.</p> <p>Students will solve single digit, one-step addition and subtraction problems.</p> <p>Students will be able to combine and separate numbers into equal groups</p>	<p>Students will understand that numbers have different values.</p> <p>Students understand that coins have different sizes, colors, markings, and values</p> <p>Students will understand that putting two small numbers together gives you a bigger number and taking a small number away from a bigger number makes a smaller number.</p> <p>Students will understand that numbers can be separated in different ways and have different outcomes.</p>	<p>Why is it important to be able to count accurately?</p> <p>When will you need to compare objects and find similarities and differences in a job?</p> <p>How can you prove that when you add two small numbers it makes a bigger number?</p> <p>When is it most important to be able to separate items into groups?</p>
<p>Geometry</p>	<p>Students will be able to identify and match three basic shapes.</p> <p>Students will be able to recognize basic positional concepts (over, under, in front, behind)</p>	<p>Student will understand that shapes can be different.</p> <p>Students will understand that positional concepts help us know the location of objects in space.</p>	<p>How are shapes different and the same?</p> <p>What would be the best way to give direction if you could not use these basic instructions?</p>
<p>Measurement</p>	<p>Students will be able to compare two objects using weight and size.</p> <p>Students will be able to identify the purpose of basic tools of measurement (clock, calendar, and ruler).</p>	<p>Students will understand the difference between heavy/light and big/small.</p> <p>Students will understand that different measuring tools are used to measure different things based on the information that is desired.</p>	<p>What two types of measurement are best to use when finding weight and size?</p> <p>How does what you measure influence how you measure?</p>

<p>Statistics &amp; Probability</p>	<p>Students will identify the different types of graphs.</p> <p>Students will identify most, least, and same on a graph or chart</p>	<p>Students will understand that the same sets of data can be graphed in different ways.</p> <p>Students will understand that the way the data is displayed, organized and collected influences interpretation.</p>	<p>What is the best graph in order to read any type of data?</p> <p>Why is data collected and analyzed?</p>
<p>Algebraic Relationships</p>	<p>Students will identify which examples are patterns and which are not.</p> <p>Students will recognize and extend two-part patterns.</p>	<p>Students will understand that patterns are repetitive.</p> <p>Students will understand that patterns provide insights into potential relationships.</p>	<p>Where in your life do you see patterns?</p> <p>In life, how can patterns be used to make predictions?</p>

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### Functional Academics – Math – Grade Band 5-6

Unit Theme	Unit Goal	Enduring Understandings for the Unit	Essential Questions for the Unit
Mathematical Processes	<p>Students will order numbers up to 50 by rote counting.</p> <p>Students will count like coins up to one dollar and bills up to five dollars.</p> <p>Students will be able to create fractions by using equal parts to make a whole.</p>	<p>Students will understand that numbers always go in a sequential order.</p> <p>Students will understand greater than and less than.</p> <p>Students will understand the values of each coin.</p> <p>Students will understand that using parts to make a whole is the foundation of fractions.</p>	<p>Why is counting accurately important?</p> <p>How should I organize my counting?</p> <p>Why do we use standard values for coins and dollar bills?</p> <p>How do I know what my fraction represents?</p> <p>How are numbers used to show fractions?</p>
Number Operations & Relationships	<p>Students will solve single-digit addition &amp; subtraction problems.</p> <p>Students will multiply &amp; divide sets of objects by 2.</p> <p>Students will compare two groups of objects using “more” or “less”</p>	<p>Students will understand that operations create relationships between numbers.</p> <p>Students will understand that the relationships between the operations and their properties promote computational fluency.</p> <p>Students will understand that numbers can be compared using greater than, less than, and equal to.</p>	<p>How are addition and subtraction related?</p> <p>How do I know if I need to cut something in half or double it?</p> <p>When presented with two groups of objects, how do I know which group has more and which group has less?</p>
Geometry	<p>Students will compare basic shapes.</p> <p>Students will identify directions on a grid.</p>	<p>Students will understand that two and three-dimensional objects can be described, classified, and analyzed by their attributes.</p> <p>Students will understand that data can be organized in different ways.</p>	<p>What attributes are important for naming shapes?</p> <p>How can coordinates help give you directions?</p>

<p>Measurement</p>	<p>Students will select a measurement tool to match their task.</p> <p>Students will develop understanding of measurement and apply appropriate units and tools.</p>	<p>Students will understand that attributes are measurable.</p> <p>Students will understand that the length of objects is measurable in different units.</p> <p>Students will understand that measurements need the same unit of measure in order to be compared.</p>	<p>What things do I need to consider to determine what measurement tool is correct for the task?</p> <p>Why do we measure?</p>
<p>Statistics &amp; Probability</p>	<p>Students will display data on a graph.</p> <p>Students will interpret a graph's meaning.</p>	<p>Students will understand that data display often reveals patterns that are used to solve problems</p> <p>Students will understand that graphs can be used to organize information and make comparisons.</p>	<p>How should I represent information so that it is most helpful and understandable for others?</p> <p>When do we use graphs?</p>
<p>Algebraic Relationships</p>	<p>Students will recognize and extend a three-part pattern.</p>	<p>Students will understand that patterns and relationships can be represented numerically, graphically, symbolically, and verbally.</p> <p>Students will understand that patterns provide insights into potential relationships.</p>	<p>Is there a pattern or relationship here?</p> <p>How much information do I need to know about the pattern in order to understand the whole pattern?</p>

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### Functional Academics – Math – Grade Band 7-8

Unit Theme	Unit Goal	Enduring Understandings for the Unit	Essential Questions for the Unit
<p>Mathematical Processes and Number Operations &amp; Relationships</p>	<p>Students will read write and represent whole numbers and represent basic fractions in everyday situations.</p> <p>Students will count and compare coins and bills of differing value.</p> <p>Students will solve basic addition and subtraction number problems and use basic multiplication and division facts to solve real world problems.</p> <p>Students will estimate (without counting) group sizes based on more or less.</p>	<p>Students will understand that there are many ways to represent a number.</p> <p>Students will understand that all money has a specific, definite value and any given amount may be attained by a variety of combinations of denominations.</p> <p>Students will understand that multiplication is repeated addition, related to division, and can be used to solve real life problems.</p> <p>Students will understand that, in certain situations, an estimate is as useful as an exact answer.</p>	<p>How does finding the common characteristics among similar problems help me to be a more efficient problem solver?</p> <p>Why do we need to know the value of money?</p> <p>How do I know which operation (add, subtract, multiply, or divide) to use?</p> <p>When is it appropriate to use estimation?</p>
<p>Geometry</p>	<p>Students will be able to sort and classify a variety of three-dimensional objects (e.g. cube, pyramid, sphere)</p> <p>Students will be able to identify parallel and intersecting lines.</p> <p>Students will be able to locate coordinates in real-world context on simple grid.</p>	<p>Students will understand that both the natural and man-made world are designed using geometric shapes.</p> <p>Students will describe the relationship between two lines.</p> <p>Students will understand that geometry helps us find exact locations in the world and gives us a way to describe how near or far objects are from each other.</p>	<p>How are attributes used to compare objects?</p> <p>How are two lines related to one another?</p> <p>How can we use geometry to describe the location of objects in relation to each other?</p>
<p>Measurement</p>	<p>Students will identify the correct unit of</p>	<p>Students will understand that measurements describe the attributes of objects.</p>	<p>How does the object I am measuring influence how I measure?</p>

	<p>measurement (e.g., cube, pyramid, sphere)</p> <p>Student will identify perimeter/ circumference and area of an object on a grid.</p>	<p>Students will understand that formulas can be used to find perimeter, circumference, and area.</p>	<p>How do I know which formula to use for circumference, perimeter, or area?</p>
<p>Statistics &amp; Probability</p>	<p>Students will interpret data from tables and simple graphs.</p> <p>Students will determine whether an event is impossible or certain.</p>	<p>Students will understand the way data is collected organized and displayed influences interpretation.</p> <p>Students will understand the probability of an event's occurrence can be predicted with varying degrees of confidence.</p>	<p>Why is data collected and analyzed?</p> <p>How can predictions be made using data?</p>
<p>Algebraic Relationships</p>	<p>Students will extend a given sequence.</p> <p>Students will solve a simple one-step, open-equality sentence.</p>	<p>Students will understand that sequences can be represented numerically, graphically, symbolically, and verbally.</p> <p>Students will understand algebraic expressions and equations generalize relationships from specific cases.</p>	<p>Why is it sometimes desirable to describe a pattern or sequence mathematically?</p> <p>When and why would we use algebraic equations to show equality?</p>

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### Functional Academics – Math – High School

Unit Theme	Unit Goal	Enduring Understandings for the Unit	Essential Questions for the Unit
Mathematical Processes & Number Operations & Relationships	<p>Students will compare positive and negative numbers.</p> <p>Students will order fractions, decimals, and percents from least to greatest.</p>	<p>Students will understand that a positive or negative sign affects the value of a number.</p> <p>Students will understand that fractions, decimals, and percents have different values.</p>	<p>How could you show why a negative number is always less than a positive?</p> <p>How can I find and position rational numbers on a number line?</p>
Geometry	<p>Students will identify lines that form angles.</p> <p>Students will identify lines that form right angles in a picture.</p>	<p>Students will understand that two lines make an angle.</p> <p>Students will understand that an angle measuring 90 degrees makes a perfect corner.</p>	<p>What are examples of angles in your environment?</p> <p>How can I prove that an angle is a right angle?</p>
Measurement	<p>Students will select and use the appropriate tools to determine the measurement of real objects using rulers, tape measures, thermometers, meter sticks, and scales.</p> <p>Students will determine the perimeter, area, and circumference of regular shapes.</p>	<p>Students will understand that measurement helps us understand and describe our world.</p> <p>Students will understand that we measure things in our world in order to determine its boundaries and limits.</p>	<p>Why do we need standard units of measurement?</p> <p>How does what we measure influence how we measure?</p>
Statistics & Probability	<p>Students will be able to read, organize, and compare data from simple graphs.</p> <p>Based on a simple graph, students will be able to determine the likelihood of events occurring based on the graph.</p> <p>Based on a simple graph, students will find a specific</p>	<p>Students will understand that graphs are a way of keeping track of things when we sort and count them..</p> <p>Students will understand that probability describes the likelihood of an event taking place.</p>	<p>What kinds of information would be appropriate for the different types of graphs?</p> <p>In what way does probability affect our everyday decisions?</p>

	object among like-sorted group.		
Algebraic Relationships	<p>Students will take a numeric simple formula and apply it to practical problems (e.g., distance, time, miles)</p> <p>Students will predict a simple mathematical pattern.</p>	<p>Students will understand that algebra is a tool to help solve real life situations using numbers and symbols to represent unknown quantities.</p> <p>Students will understand that patterns can provide insights into potential relationships.</p>	<p>How can algebra help us solve real life problems using numbers and symbols?</p> <p>How might I express a pattern to make predictions?</p>