

## Year-at-a-Glance (YAG) --- Kindergarten --- Mathematics

The **Year at a Glance (YAG)** lays out all of the long term learning targets a student is expected master by the end of the year by bundling and sequencing them into the right units. On this YAG you will also see the Minnesota Standards and Benchmarks that align to the learning targets.

**Learning Targets:** Learning Targets are “student friendly” versions of the benchmarks. The Learning Targets should be posted in the classroom and used with students to describe the learning of the day. **Please note:** Because the language of the learning targets has been modified to be more accessible to students they do not fully reflect the depth and rigor of the benchmarks. For this reason it is important to consult the standards and benchmarks when planning instruction.

**Standards:** Standards and benchmarks set the expectations for achievement in mathematics for K-12 students in Minnesota. The standards represent a connected body of mathematical knowledge students learn through the processes of problem solving, reasoning, communication, making connections, and representation. The standards are grouped by strands: 1) Number and Operation; 2) Algebra; 3) Geometry and Measurement; 4) Data Analysis and Probability.

**Benchmarks:** The benchmarks provide specific details about the mathematical understanding and skills that students must meet to satisfy the standards. They are designed to inform and guide schools and teachers in developing curriculum and instruction.

First Semester	Second Semester
<p><b><u>Unit 1: Patterns I</u></b> 6 weeks Approximate Dates: August 31- October 14, 2016</p> <p><b><u>Unit 2: Two-dimensional Shapes</u></b> 3 weeks Approximate Dates: October 17-November 11, 2016</p> <p><b><u>Unit 3: Counting Collections and Number Relationships</u></b> 7 weeks Approximate Dates: November 14- January 19, 2017</p> <p><b><u>Unit 4: Compare, Order and Sort by Attributes</u></b> 5 weeks Approximate Dates: January 20- February 28, 2017</p>	<p><b><u>Unit 5: Three-dimensional Shapes</u></b> 2 ½ weeks Approximate Dates: March 1 - March 17, 2017</p> <p><b><u>Unit 6: Solving Problems</u></b> 7 weeks Approximate Dates: March 20-May 12, 2017</p> <p><b><u>Unit 7: Patterns 2</u></b> 3 weeks Approximate Dates: May 15- June 9, 2017</p>

## First Semester

### Unit 1: Patterns I (6 weeks)

*Approximate Dates: August 31 - October 14, 2016*

Learning Targets	Standards		
	Strand / Standard	No.	Benchmark
<p><b><u>Unit Long Learning Targets</u></b></p> <p><b>1.1</b> I can describe and create repeating patterns. (K.2.1.1)</p> <p><b>1.2</b> I can learn in math workshop. ( K.2.1.1)</p>	<b>Algebra</b>	Recognize, create, complete, and extend patterns.	K.2.1.1 Identify, create, complete, and extend simple patterns using shape, color, size, number, sounds and movements. Patterns may be repeating, growing or shrinking such as ABB, ABB, ABB or ●,●●,●●●.

### Unit 2: Two-dimensional Shapes (3 weeks)

*Approximate Dates: October 17 - November 11, 2016*

Learning Targets	Standards		
	Strand / Standard	No.	Benchmark
<p><b><u>Unit Long Learning Targets</u></b></p> <p><b>2.1</b> I can recognize 2D shapes. (K.3.1.1)</p> <p><b>2.2</b> I can sort 2D shapes and explain my thinking. (K.3.1.2)</p> <p><b>2.3</b> I can use shapes to create a picture and explain the picture. (K.3.1.3)</p>	<b>Geometry &amp; Measurement</b>	Recognize and sort basic two- and three-dimensional shapes; use them to model real-world objects.	K.3.1.1 Recognize basic two- and three-dimensional shapes such as squares, circles, triangles, rectangles, trapezoids, hexagons, cubes, cones, cylinders and spheres.  K.3.1.2 Sort objects using characteristics such as shape, size, color and thickness.  K.3.1.3 Use basic shapes and spatial reasoning to model objects in the real-world.

**Unit 3: Counting Collections and Number Relationships (7 weeks)**
*Approximate Dates: November 14- January 19, 2017*

Learning Targets	Standards		
<u>Unit Long Learning Targets</u>	Strand / Standard	No.	Benchmark
<p><b>3.1</b> I can represent numbers up to 20 many different ways. (K.1.1.1, K.1.1.2)</p> <p><b>3.2</b> I can count forward from any number up to 10. (K.1.1.3, K.1.1.4)</p> <p><b>3.3</b> I can count backward from any number up to 10. (K.1.1.3, K.1.1.4)</p> <p><b>3.4</b> I can accurately count to solve problems. (K.1.1.5)</p> <p><b>3.5</b> I can find a number that is 1 more or 1 less than a given number.(K.1.1.4)</p> <p><b>3.6</b> I can compare and order whole numbers, with and without objects, from 0 to 20. (K.1.1.5)</p>	<b>Number &amp; Operation</b>	Understand the relationship between quantities and whole numbers up to 31	<p>K.1.1.1 Recognize that a number can be used to represent how many objects are in a set or to represent the position of an object in a sequence.</p> <p>K.1.1.2 Read, write, and represent whole numbers from 0 to at least 31. Representations may include numerals, pictures, real objects and picture graphs, spoken words, and manipulatives such as connecting cubes.</p> <p>K.1.1.3 Count, with and without objects, forward and backward to at least 20.</p> <p>K.1.1.4 Find a number that is 1 more or 1 less than a given number.</p> <p>K.1.1.5 Compare and order whole numbers, with and without objects, from 0 to 20.</p>

**Unit 4: Compare, Order and Sort by Attributes (5 weeks)**
*Approximate Dates: January 20- February 28, 2017*

Learning Targets	Standards		
<u>Unit Long Learning Targets</u>	Strand / Standard	No.	Benchmark
<p><b>4.1</b> I can describe the attributes of objects. (K.3.1.2)</p> <p><b>4.2</b> I can compare the attributes of objects. (K.3.2.1)</p> <p><b>4.3</b> I can order objects by their attributes. (K.3.2.2)</p> <p><b>4.4</b> I can sort objects by their attributes. (K.3.1.2)</p>	<b>Geometry &amp; Measurement</b>	<p>Recognize and sort basic two- and three-dimensional shapes; use them to model real-world objects.</p> <p>Compare and order objects according to location and measurable attributes.</p>	<p>K.3.1.2 Sort objects using characteristics such as shape, size, color and thickness.</p> <p>K.3.2.1 Use words to compare objects according to length, size, weight and position.</p> <p>K.3.2.2 Order 2 or 3 objects using measurable attributes, such as length and weight.</p>

## Second Semester

### Unit 5: Three-dimensional Shapes (2 ½ weeks)

*Approximate Dates: March 1 - March 17, 2017*

Learning Targets	Standards		
	Strand / Standard	No.	Benchmark
<b>5.1</b> I can recognize 3D shapes. (K.3.1.1) <b>5.2</b> I can sort 3D shapes. (K.3.1.2) <b>5.3</b> I can match 3D shapes to objects around me. (K.3.1.3)	Number & Operation  Understand the relationship between quantities and whole numbers up to 31	K.1.1.1	Recognize that a number can be used to represent how many objects are in a set or to represent the position of an object in a sequence.
		K.1.1.2	Read, write, and represent whole numbers from 0 to at least 31. Representations may include numerals, pictures, real objects and picture graphs, spoken words, and manipulatives such as connecting cubes.
		K.1.1.3	Count, with and without objects, forward and backward to at least 20.

### Unit 6: Solving Problems (7 weeks)

*Approximate Dates: March 20-May 12, 2017*

Learning Targets	Standards		
	Strand / Standard	No.	Benchmark
<b>Unit Long Term Learning Targets:</b> <b>6.1</b> I can solve addition and subtraction problems with numbers up to 10. (K.1.2.1) <b>6.2</b> I can take apart and put together numbers up to 10. (K.1.2.2) <b>6.3</b> I can represent numbers up to 31 many different ways. (K.1.1.2) <b>6.4</b> I can count forward from any number up to 31. (K.1.1.3) <b>6.5</b> I can count backward from any number between	Number & Operation  Understand the relationship between quantities and whole numbers up to 31	K.1.1.2	Read, write, and represent whole numbers from 0 to at least 31. Representations may include numerals, pictures, real objects and picture graphs, spoken words, and manipulatives such as connecting cubes.
K.1.1.3		Count, with and without objects, forward and backward to at least 20.	
K.1.1.5		Compare and order whole numbers, with and without objects, from 0 to 20.	

1 and 31. (K.1.1.3) <b>6.6</b> I can compare and order whole numbers up to 20. (K.1.1.5)	Use objects and pictures to represent situations involving combining and separating.	K.1.2.1	Use objects and draw pictures to find the sums and differences of numbers between 0 and 10.
		K.1.2.2	Compose and decompose numbers up to 10 with objects and pictures.

<b>Unit 7: Patterns 2 (3 weeks)</b> <i>Approximate Dates: May 15- June 9, 2017</i>					
Learning Targets		Standards			
<u>Unit Long Term Learning Targets:</u>		Strand / Standard	No.	Benchmark	
<b>7.1</b> I can describe and create repeating, growing and shrinking patterns. (K.2.1.1)		Algebra	Recognize, create, complete, and extend patterns.	K.2.1.1	Identify, create, complete, and extend simple patterns using shape, color, size, number, sounds and movements. Patterns may be repeating, growing or shrinking such as ABB, ABB, ABB or ●,●●,●●●.