

Curriculum Grade Book

Morgan County School District

Final, 01/11/2010

Math- Grade 8

Mathematics

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
The learner will be able to explain how operations (addition and subtraction; multiplication and division; squaring and taking the square root of a number) are inversely related.																														
<p>■ 1.4.1 DOK 2 ASSESSED</p> <p>The learner will be able to apply ratios and proportional reasoning to solve real-world problems (e.g., percents, constant rate of change, unit pricing, percent of increase or decrease).</p>																														
<p>■ 1.5.2 DOK 1 ASSESSED</p> <p>The learner will be able to identify the use of properties (commutative properties of addition and multiplication, the associative properties of addition and multiplication, the identity properties for addition and multiplication, inverse properties and the distributive property of multiplication over addition and subtraction) to justify a given step in problems.</p>																														
Measurement (15%)																														
<p>■ 2.1.1 DOK 3 ASSESSED</p> <p>The learner will be able to measure lengths (to the nearest sixteenth of an inch or the nearest millimeter) and will determine and use in real-world and mathematical problems:</p> <ul style="list-style-type: none"> *Area and perimeter of triangles and quadrilaterals; *Area and circumference of circles; *Area and perimeter of compound figures composed of triangles, quadrilaterals, and circles; *Area from circumference or perimeter; and *Circumference or perimeter from area. 																														
■ 2.1.2 Supporting																														

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The learner will be able to estimate measurements in standard units in real world and mathematical problems.																															
<p>■ 2.1.3 DOK 2 ASSESSED</p> <p>The learner will be able to evaluate the measures of angles by estimation, measurement with a protractor or angle ruler and determine angle measures in mathematical and real-world situations (e.g., supplementary, external, vertical).</p>																															
<p>■ 2.2.1 DOK 2 ASSESSED</p> <p>The learner will be able to covert units within the same measurement system and use these units to solve real-world problems.</p>																															
<p>■ 2.1.4 DOK 2 ASSESSED</p> <p>The learner will be able to apply formulas to determine that volume of rectangular prisms in real world and mathematical problems.</p>																															
<p>■ 2.1.5 Supporting</p> <p>The learner will be able to use formulas to find surface area of right rectangular prisms in real world and mathematical problems.</p>																															
<p>■ 2.1.6 DOK 2 ASSESSED</p> <p>The learner will be able to apply the Pythagorean theorem to determine the length of a hypotenuse.</p>																															
Geometry (20%)																															
<p>■ 3.1.1 Supporting</p> <p>The learner will be able to describe and provide examples of the basic geometric elements that include points, rays, lines, segments, angles, planes, and will use these elements in real-world and mathematical problems.</p>																															
<p>■ 3.1.2 DOK 2 ASSESSED</p>																															

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The learner will be able to identify and compare properties of two-dimensional figures (circles, triangles [acute, right, obtuse, scalene, isosceles, equilateral]), quadrilaterals (square, rectangle, rhombus, parallelogram, trapezoid], regular/irregular polygons), and will apply these elements and figures to solve real-world and mathematical problems.

■ 3.1.3 DOK 2 ASSESSED

The learner will be able to compare properties of three-dimensional figures (spheres, cones, cylinders, prisms, pyramids), and will apply these properties and figures to solve real-world and mathematical problems.

■ 3.1.4 DOK 3 ASSESSED

The learner will be able to provide examples of congruent and similar figures, apply congruent and similar figures to solve real-world and mathematical problems, and apply proportional reasoning to solve problems involving scale drawings and proportional figures.

■ 3.2.1 Supporting

The learner will be able to describe, provide examples of, and apply to real-world and mathematical problems rotational symmetry (90 degrees, 180 degrees, 360 degrees).

■ 3.2.2 DOK 2 ASSESSED

The learner will be able to transform (translations, reflections, and dilations with the center of dilation at the origin) figures in a coordinate plane and determine the new coordinates of the image after the transformation.

■ 3.2.3 Supporting

The learner will be able to identify rotation (clockwise or

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<p>median, mode, and range of a set of data; *Identify clusters, gaps, and outliers; and these concepts to compare sets of data. *Apply</p>																														
<p>■ 4.4.1 DOK 2 ASSESSED The learner will be able to apply counting techniques to determine the size of a sample space for a real-world or mathematical situation.</p>																														
<p>■ 4.4.2 DOK 3 ASSESSED The learner will be able to *Determine theoretical probabilities of simple events; *Determine probabilities based on the results of an experiment; and inferences from probability data. *Make</p>																														
<p>■ 4.4.3 Supporting The learner will be able to tabulate experimental results from simulations and explain how theoretical and experimental probabilities are related.</p>																														
<p>■ 4.1.5 Supporting The learner will be able to construct box-and-whiskers plots.</p>																														
<p>■ 4.3.1 Supporting The learner will be able to explain how data gathering, bias issues, and faulty data analysis, can affect the results of data collection.</p>																														
<p>■ 4.4.4 Supporting The learner will be able to determine theoretical probabilities and represent them using area models.</p>																														

