

VGLA COE Organizer

Mathematics 5

Place evidence that has been collected for submission behind the VGLA COE Organizer. Cardstock or colored paper may be used to assist in the organization of the COE.

5.1 The student will	
a)	read the place values of decimals through thousandths,
	write the place values of decimals through thousandths, and
	identify the place values of decimals through thousandths;
b)	round decimal numbers to the nearest tenth or hundredth; and
c)	compare the values of two decimals through thousandths, using the symbols $>$, $<$, or $=$.

VGLA COE Organizer

Mathematics 5

Place evidence that has been collected for submission behind the VGLA COE Organizer. Cardstock or colored paper may be used to assist in the organization of the COE.

5.2 The student will	
a)	recognize and name commonly used fractions in their equivalent decimal form and vice versa
	halves,
	fourths,
	fifths,
	eighths, and
	tenths; and
b)	order a given set of
	fractions from least to greatest and
	decimals from least to greatest.
Fractions will include like and unlike denominators limited to 12 or less, and mixed numbers.	

VGLA COE Organizer

Mathematics 5

Place evidence that has been collected for submission behind the VGLA COE Organizer. Cardstock or colored paper may be used to assist in the organization of the COE.

5.3 The student will create and solve problems involving addition, subtraction, multiplication, and division of whole numbers, using	
	paper and pencil,
	estimation,
	mental computation, and
	calculators.

VGLA COE Organizer

Mathematics 5

Place evidence that has been collected for submission behind the VGLA COE Organizer. Cardstock or colored paper may be used to assist in the organization of the COE.

5.4 The student will find the sum, difference, and product of two numbers expressed as decimals through thousandths, using an appropriate method of calculation, including	
	paper and pencil,
	estimation,
	mental computation, and
	calculators.

VGLA COE Organizer

Mathematics 5

Place evidence that has been collected for submission behind the VGLA COE Organizer. Cardstock or colored paper may be used to assist in the organization of the COE.

5.5 The student, given a dividend of four digits or fewer and a divisor of two digits or fewer, will	
	find the quotient and remainder.

VGLA COE Organizer

Mathematics 5

Place evidence that has been collected for submission behind the VGLA COE Organizer. Cardstock or colored paper may be used to assist in the organization of the COE.

5.6 The student, given a dividend expressed as a decimal through thousandths and a single-digit divisor, will	
--	--

	find the quotient.
--	--------------------

VGLA COE Organizer

Mathematics 5

Place evidence that has been collected for submission behind the VGLA COE Organizer. Cardstock or colored paper may be used to assist in the organization of the COE.

5.7 The student will	
	add and subtract with fractions and mixed numbers,
	with and without regrouping, and
	express answers in simplest form.
<i>Problems will include like and unlike denominators limited to 12 or less.</i>	

VGLA COE Organizer

Mathematics 5

Place evidence that has been collected for submission behind the VGLA COE Organizer. Cardstock or colored paper may be used to assist in the organization of the COE.

5.8 Given the appropriate measures the student will <u>describe</u> and <u>determine</u> the	
	perimeter of a polygon,
	area of a square,
	area of a rectangle, and
	right triangle,.

VGLA COE Organizer

Mathematics 5

Place evidence that has been collected for submission behind the VGLA COE Organizer. Cardstock or colored paper may be used to assist in the organization of the COE.

5.9 The student will identify and describe the	
	diameter of a circle,
	radius of a circle,
	chord of a circle, and
	circumference of a circle.

VGLA COE Organizer

Mathematics 5

Place evidence that has been collected for submission behind the VGLA COE Organizer. Cardstock or colored paper may be used to assist in the organization of the COE.

5.10 The student will	
	differentiate between
	perimeter,
	area, and
	volume; and
	identify whether the application of the concept of perimeter, area, or volume is appropriate for a given situation.

VGLA COE Organizer

Mathematics 5

Place evidence that has been collected for submission behind the VGLA COE Organizer. Cardstock or colored paper may be used to assist in the organization of the COE.

5.11 The student will choose an appropriate measuring device and unit of measure to solve problems involving measurement of	
a)	length
	part of an inch (1/2, 1/4, and 1/8),
	inches,
	feet,
	yards,
	miles,
	millimeters,
	centimeters,
	meters, and kilometers;
b)	weight/mass
	ounces,
	pounds,
	tons,
	grams, and kilograms;
c)	liquid volume
	cups,
	pints,
	quarts,
	gallons,
	milliliters, and liters;
d)	area
	square units; and
e)	temperature
	Celsius units and Fahrenheit units.
	<i>Problems also will include estimating the conversion of Celsius and Fahrenheit units relative to familiar situations (water freezes at 0°C and 32°F, water boils at 100°C and 212°F, normal body temperature is about 37°C and 98.6°F).</i>

VGLA COE Organizer

Mathematics 5

Place evidence that has been collected for submission behind the VGLA COE Organizer. Cardstock or colored paper may be used to assist in the organization of the COE.

5.12 The student will	
	determine an amount of elapsed time in hours and minutes within a 24-hour period.

VGLA COE Organizer

Mathematics 5

Place evidence that has been collected for submission behind the VGLA COE Organizer. Cardstock or colored paper may be used to assist in the organization of the COE.

5.13 The student will	
	measure and draw
	right angles,
	acute angles,
	obtuse angles, and
	angles and triangles using appropriate tools.

VGLA COE Organizer

Mathematics 5

Place evidence that has been collected for submission behind the VGLA COE Organizer. Cardstock or colored paper may be used to assist in the organization of the COE.

5.14 The student will classify	
	angles as right, acute, or obtuse. and
	triangles as right, acute, or obtuse.

VGLA COE Organizer

Mathematics 5

Place evidence that has been collected for submission behind the VGLA COE Organizer. Cardstock or colored paper may be used to assist in the organization of the COE.

5.15 The student, using two-dimensional (plane) figures (square, rectangle, triangle, parallelogram, rhombus, kite, and trapezoid) will	
a)	recognize,
	identify,
	describe, and
	analyze their properties in order to develop definitions of these figure;
b)	identify and explore
	congruent,
	noncongruent, and
	similar figures;
c)	investigate and describe the results of
	combining shapes and
	subdividing shapes;
d)	identify a line of symmetry and
	describe a line of symmetry;
e)	recognize the images of figures resulting from geometric transformations such as translation (slide), reflection (flip), or rotation (turn).

VGLA COE Organizer

Mathematics 5

Place evidence that has been collected for submission behind the VGLA COE Organizer. Cardstock or colored paper may be used to assist in the organization of the COE.

5.16 The student will identify, compare, and analyze properties of three-dimensional (solid) geometric shapes	
	cylinder,
	cone,
	cube,
	square pyramid, and
	rectangular prism.

VGLA COE Organizer

Mathematics 5

Place evidence that has been collected for submission behind the VGLA COE Organizer. Cardstock or colored paper may be used to assist in the organization of the COE.

5.17 The student will	
a)	solve problems involving the probability of a single event by using tree diagrams or by constructing a sample space representing all possible results;
b)	predict the probability of outcomes of simple experiments,
	representing it with fractions or decimals from 0 to 1, and
	test the prediction; and
c)	create a problem statement involving probability and based on information from a given problem situation. Students will not be required to solve the created problem statement.

VGLA COE Organizer

Mathematics 5

Place evidence that has been collected for submission behind the VGLA COE Organizer. Cardstock or colored paper may be used to assist in the organization of the COE.

5.18 The student will, given a problem situation, collect, organize, and display a set of numerical data in a variety of forms, using	
	bar graphs to draw conclusions and make predictions,
	stem-and-leaf plots to draw conclusions and make predictions, and
	line graphs to draw conclusions and make predictions.

VGLA COE Organizer

Mathematics 5

Place evidence that has been collected for submission behind the VGLA COE Organizer. Cardstock or colored paper may be used to assist in the organization of the COE.

5.19 The student will find the	
	mean of a set of data,
	median of a set of data,
	mode of a set of data, and
	range of a set of data.

VGLA COE Organizer

Mathematics 5

Place evidence that has been collected for submission behind the VGLA COE Organizer. Cardstock or colored paper may be used to assist in the organization of the COE.

5.20 The student will analyze the structure of numerical and geometric patterns (how they change or grow) and express the relationship, using words, tables, graphs, or a mathematical sentence.	
	concrete materials and
	calculators will be used.

VGLA COE Organizer

Mathematics 5

Place evidence that has been collected for submission behind the VGLA COE Organizer. Cardstock or colored paper may be used to assist in the organization of the COE.

5.21 The student will	
a)	investigate the concept of variable and describe the concept of variable;
b)	use a variable expression to represent a given verbal quantitative expression, involving one operation; and
c)	write an open sentence to represent a given mathematical relationship, using a variable.

VGLA COE Organizer

Mathematics 5

Place evidence that has been collected for submission behind the VGLA COE Organizer. Cardstock or colored paper may be used to assist in the organization of the COE.

5.22 The student will	
	create a problem situation based on a given open sentence using a single variable.