

K-12 MAJOR STRAND GLE's ACROSS GRADE LEVELS

Scope & Sequence

Revised 5-4-09

Measurement

Perimeter, Area, Volume, Circumference

K	1	2	3	4	5	6	7	8	ALG	GEO	Adv. ALG
Compare and order objects according to their size or weight	Compare and order objects according to their size or weight (DLE)	Determine the perimeter of polygons with all measures given (DLE)	Compare and order objects according to size or weight. Identify and justify the appropriate unit of measurement Determine the perimeter of polygons	Identify and justify the unit of linear measure including perimeter using customary and metric units Determine and justify areas of polygons and non-polygonal regions imposed on a rectangular grid Determine the difference between perimeter,	Identify and justify the unit of measure for area (customary and metric) Determine perimeter of polygons (DLE) Determine volume of rectangular prisms by finding the total number of the same size units needed to fill a space without gaps or overlaps	Identify and justify units of area and volume (metric and customary) Solve problems involving area/perimeter of polygons Solve problems involving area/perimeter of circles	Identify and justify units of area & volume (metric and customary) Measure surface area of prisms cylinders and volume of prisms, pyramids, cylinders, cones and spheres Measure circumference and area of circles Solve problems involving area/perimeter of polygons Solve problems involving area/perimeter of circles		Determine areas of irregular polygons (DLE)	Determine surface area and the volume of geometric figures (cones, cylinders, spheres) Solve problems involving areas of irregular polygons (DLE)	

				area, and volume (DLE)							

Measurement Systems and Processes and Angle/Linear Measurement

K	1	2	3	4	5	6	7	8	ALG	GEO	Adv. ALG
Measure objects by comparison of length (shorter, same, longer)	Select the appropriate tool for the attribute being measured (size, temperature, time, weight) Use repetition of a single unit to measure something larger than the unit (measuring the length of the room with a single meter stick; length of a book with paper clips)	Select the appropriate tool for the attribute being measured (size, temperature, time, weight) and measure to the nearest inch, centimeter, degree, hour, and pound	Select an appropriate tool and unit for measuring an attribute Measure to the nearest ½ inch and nearest centimeter (DLE) Use a referent /benchmark for measures to make estimates and comparisons	Measure to the nearest ¼ inch and nearest centimeter (DLE) Identify equivalent linear measures within a system Select benchmarks/ referents to estimate linear, capacity, and weight Select benchmarks/ referents to estimate measurements of angles (acute, right, obtuse)	Measure to the nearest 1/8 inch (DLE) Estimate measurements (linear, capacity, weight)	Identify angles by name and measurements Measure line segments with ruler; discuss measurement accuracy, precision	Identify angles by name and measurements (reflex, acute, etc.) Measure line segments with ruler; discuss measurement accuracy, precision (DLE)	Find angle measures involving triangles and parallel lines cut by a transversal		Properties of parallel lines cut by a transversal Solve problems involving angles of polygons	

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Conversions (Units & Time)

K	1	2	3	4	5	6	7	8	ALG	GEO	Adv. ALG
Describe passage of time using terms such as today, yesterday, tomorrow	Tell time to the nearest half-hour	Tell time to the nearest quarter hour	Tell time to the nearest 5 minutes	Tell time to the nearest minute	Tell time to the nearest minute and solve problems involving elapsed time (hr./min.)	Calculate elapsed time	Add/subtract hours, minutes, seconds, etc.	Determine precision and accuracy of measurement (including significant digits)	Use unit analysis to solve problems	Use unit analysis to solve problems	Apply concepts of successive approximations
Identify and know the value of a penny, nickel, dime, and quarter	Count money to a dollar, including half dollars	Make change from one dollar	Identify, know the value of, and count money.	Determine change from \$10.00 and add/subtract money values to \$10.00	Identify the equivalent weights and capacities within a system of measurement (DLE)	Convert from one unit to another within a system (mass and weight)	Convert from one unit to another within a system (area, volume, mass, weight, capacity)	Judge reasonableness of solutions	Judge reasonableness of solutions	Use unit analysis to solve problems	Use unit analysis to solve problems
		Use standard units of measurement (cm and inch) and the inverse relationships between the size and number of units	Add and subtract money values to \$5.00 and make change from \$5.00	Count money and determine change from any amount (DLE)	Identify equivalent linear measures within a system of measurement			Discuss effects of operations and rounding on precision of solutions			

					system of linear measurement (customary and metric)						
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*Keith Louder
John Wilbers
Dianne Marshall*

*Tori Webber
Kelly Whalen
Elaine Hansett*

*Dave Bogdon
Becky Shaefer
Kelly Sonwalt*

*Patty Swisher
Julie Robinson
Megan Jenkins*