

**Subject: Geometry**

**Year 3**

Unit Title	Rules and Tools of Geometry	Presto-Chango-Transformations	Tri This	Quadrilaterals, Other Polygons, and Similarity	Tri-Trig-Ci	Packaging Our World
<b>SOI</b>	We can prove the relationship between 2-D and 3-D concepts through analysis and logic.	Geometric figures are transformed to create new images.	We identify triangular form using relationships.	Discovering relationships, such as measurement and congruence, we justify the classification of specific objects in a group.	We use relationships within forms to determine measurements of objects in space.	Skills of measurement can lead to more efficient use of materials in 3-D forms.
<b>Key Concept</b>	Logic	Change	Form	Relationships	Relationships	Form
<b>Related Concepts</b>	Relationships	Form	Relationships	Measurement Justification	Measurement Form	Measurement
<b>Global Context</b>	Personal and Cultural Expression (through analysis and argument)	Orientation in Space and Time	Identities and Relationships	Scientific and Technical Innovation (explored through puzzles and discoveries)	Orientation in Time and Space	Globalization and Sustainability
<b>Criterion</b>	A. i,ii,iii	B. i,ii,iii C.i,ii,iii,iv,v	A. i,ii,iii D.i,ii,iii,iv,v	A. i,ii,iii C. i,ii,iii,iv,v	A. i,ii,iii B. i,ii,iii	A. i,ii,iii D. i,ii,iii,iv,v
<b>ATL</b>	Communication Self-Management	Communication Thinking	Thinking	Thinking	Social Self-Management	Communication Thinking
<b>Content</b>	Points, lines, planes	Reflections, translations, compositions of transformation and symmetry	Triangles: angles, congruence proving congruence, right, isosceles, equilateral, SSS,SAS,ASA,AAS Coordinate proof, bisectors, medians, altitudes, inequalities, indirect proofs	Angles of polygons, parallelograms, rectangles, rhombi, squares, trapezoids, kites, dilations similarity, parallel lines and proportional parts, similar triangles	Geometric mean, Pythagorean Theorem and converse, special right triangles, trigonometry, angles of elevation and depression, sin, cosine, circumference, circle angles/arcs/chords , inscribed angles, tangents, secants, equations of circles and parabolas	Area: parallelograms, triangles, trapezoids, rhombi, kites, circles, sectors, regular polygons, composite figures, nonrigid transformations, surface area. Volume: cross sections, prisms, cylinders, pyramids, cones, spheres, spherical geometry, nonrigid transformations