Applied Geometry Scope and Sequence

Chapter	Days	Topics
CH1 - Measurement	2	Lesson 1 – Calculator Buttons (calculator reference sheet, TI-84+ Caching)
CH1 – Measurement	1	Lesson 2 – Evaluation
CH1 – Measurement	2	Lesson 3 – Linear Equations (solving, flowchart, notes, practice, variable on both sides)
CH1 – Measurement	2	Lesson 4 – Using Tools To Measure (measurement activity, angle types, measuring angles with a protractor)
CH1 – Measurement	6	Lesson 5 – Tools of Geometry (vocabulary, stations activity, parallel lines)
CH1 – Measurement	2	ACTIVITY: Geometry Scavenger Hunt
CH1 – Measurement	2	SUMMATIVE ASSESSMENT: Foldable/Review/Test
CH2 – Shapes	2	Lesson 1 – The Sum of the Interior angles of a triangle
CH2 – Shapes	1	Lesson 2 – Triangle Inequality (largest angle, largest side)
CH2 – Shapes	2	Lesson 3 – Types of Triangles (classify by side and angle: acute, obtuse, right, scalene, isosceles, equilateral) – Notes and Applied Problems
CH2 – Shapes	3	ASSESSMENT: Try Your Hand and Drawing Triangles (Lesson 4)
CH2 – Shapes	1	Lesson 5 – Quadrilaterals – Sum of Angles
CH2 – Shapes	2	Lesson 6 – Types of Quadrilaterals (properties/classification) ASSESSMENT: Venn Diagram Project
CH2 – Shapes	1	Lesson 7 – Circles Introduction (Radius, diameter, 360 degrees, circumference, chord, central angle)
CH2 – Shapes	1	Lesson 8 - Central angles and arcs (and circle graphs)
CH2 – Shapes	2	ASSESSMENT: Try Your Hand at Drawing Quadrilaterals and Circles
CH2 – Shapes	1	Lesson 9 – Sum of the Interior angles in any polygon (triangle, quadrilateral, pentagon, hexagon, heptagon, octagon)
CH2 – Shapes	2	SUMMATIVE ASSESSMENT: Foldable/Review/Test

Chapter	Days	Topics
CH3 – Geometric Patterns All Around US	1	Lesson 1 – The Fibonacci Sequence
CH3 – Geometric Patterns All Around US	1	Lesson 2 – The Golden Ratio
CH3 – Geometric Patterns All Around US	1	Lesson 3 – Finding the Golden Ratio
CH3 – Geometric Patterns All Around US	1	Lesson 4 – Body Measurements (and the golden ratio)
CH3 – Geometric Patterns All Around US	1	Lesson 5 – Where, How, Why?
CH3 – Geometric Patterns All Around US	1	Lesson 6 – Pascal's Triangle
CH3 – Geometric Patterns All Around US	1	Lesson 7 – Antonio's Pizza Palace
CH3 – Geometric Patterns All Around US	1	Lesson 8 – Sierpinski Triangle
CH3 – Geometric Patterns All Around US	1	ASSESSMENT: Sierpinski Triangle
CH3 – Geometric Patterns All Around US	1	Lesson 9 – Hunting the Hidden Dimension (NOVA video about Fractals)
CH3 – Geometric Patterns All Around US	1	Lesson 10 – The Koch Curve
CH3 – Geometric Patterns All Around US	2	SUMMATIVE ASSESSMENT: Foldable/Review/Test
CH4 – 2D Perimeter & Area	3	Lesson 1 – Perimeter (of triangles, rectangles, squares, circumference – full/semi/quarter, and perimeter of irregular shapes)
CH4 – 2D Perimeter & Area	7	Lesson 2 – Area (vocabulary, triangles, rectangles, squares, circles – full/semi/quarter, Cast Away, Pizza area, combined areas, applied area)
CH4 – 2D Perimeter & Area	1	Lesson 3 – Area of figures on a grid

Chapter	Days	Topics
CH4 – 2D Perimeter & Area	2	Lesson 4 – Building costs
CH4 – 2D Perimeter & Area	8	ASSESSMENT: Build a Tiny House/Design a House or Apartment
CH5 – Transformations	1	Lesson 1 – Plotting Points Review
CH5 – Transformations	1	Lesson 2 – Translations
CH5 – Transformations	1	Lesson 3 – Reflections
CH5 – Transformations	1	Lesson 4 – Investigating Rotations
CH5 – Transformations	1	Lesson 5 – Rotations
CH5 – Transformations	1	Lesson 6 – Dilations
CH5 – Transformations	1	Lesson 7 – Practice with Transformations
CH5 – Transformations	1	Battleship Reflections Activity
CH5 – Transformations	4	ASSESSMENT: Picture Transformation
CH5 – Transformations	1	Lesson 8 – Symmetry
CH5 – Transformations	1	Lesson 9 – Face Symmetry
CH5 – Transformations	1	ASSESSMENT: Symmetry in Car Logos
CH5 – Transformations	3	ASSESSMENT: Photo Activity (Mathbits photo symmetry of the face and face symmetry project)
CH5 – Transformations	1	ACTIVITY: Dilations Recipe
CH6 – 3D Surface Area & Volume	3	Lesson 1 – Surface Area (nets, prism, pyramid, cylinder, practice)
CH6 – 3D Surface Area & Volume	2	ACTIVITY: File Cabinet Surface Area
CH6 – 3D Surface Area & Volume	3	Lesson 2 – Volume (formulas, demonstrations & videos, practice)
CH6 – 3D Surface Area & Volume	1	ACTIVITY: Lung Capacity Lab
CH6 – 3D Surface Area & Volume	2	ACTIVITY: Volume of your hand

Chapter	Days	Topics
CH6 – 3D Surface Area & Volume	5	ASSESSMENT: Add a pool to your house
CH7 – Seeing is Believing	2	Lesson 1 Optical Illusions (optical illusions PowerPoint, Brain Games episodes)
CH7 – Seeing is Believing	2	ACTIVITY: Three favorite optical illusions
CH7 – Seeing is Believing	2	ASSESSMENT: Drawing Optical Illusions (3D Hand, 3D illusion cube, 3D Hole)
CH7 – Seeing is Believing	1	Lesson 2 – M.C. Escher – The Art of the Impossible
CH7 – Seeing is Believing	2	ACTIVITY: Tessellations
CH7 – Seeing is Believing	6	Other Geometries Activity (polyhedron activity, impossible figures, self-reference)
CH8 – Right Triangles	3	Lesson 1 – Pythagorean Theorem (formula, practice, bird and dog race)
CH8 – Right Triangles	2	ASSESSMENT: Put a Fence Around Your Yard
CH8 – Right Triangles	4	Lesson 2 – Right Triangle Trigonometry (identify sides, soh-cah-toa, trigonometry ratios, application problems)
CH8 – Right Triangles	4	ASSESSMENT: Measuring Height Indirectly (Flagpole height measurement)