

## Geometry Module

### Required Materials by Activity

<b>Section 1- Introduction</b>	
<b>Text/Activity</b>	<b>Materials</b>
Inductive and Deductive Reasoning	Pencil and paper
Pythagorean Theorem- 4 proofs	Calculator, scissors
Introduction to Cabri Junior™ Software	TI-83+ graphing calculators with to Cabri Junior™ software
<b>Section 2-Euclidean Geometry-Axiomatic System</b>	
Axiomatic System	Pencil, paper and straight edge
<i>Activity: Land Ho!</i>	Grid paper ,protractor, straight edge, patty paper
Constructions	Straight edge, compass, <i>The Geometer's Sketchpad software</i>
<b>Section 3- Polygons</b>	
Triangles	Patty paper, scissors, straight edge, TI-83+ graphing calculator with Cabri Junior
<i>Activity: Look Alikes</i>	TI-83+ graphing calculators with Cabri Junior™ software, compass (optional), straight edge (optional)
Quadrilaterals	TI-83+ graphing calculators with Cabri Junior™, patty paper, scissors
<i>Activity: Puzzling Polygons</i>	Pattern blocks or pattern block templates
Similar Polygons	TI-83+ graphing calculators with Cabri Junior™
<i>Activity: Patterns by Design</i>	Tangrams (1 set per two participants), paper for recording and cutting strips of paper, map pencils (optional), straight edge, patty paper, scissors, cellophane tape
<b>Section 4-Transformations(reflections, translations, rotations)</b>	
Reflections	Straight edge, Mira (optional), patty paper or tracing paper, graph paper
<i>Activity: Hole in One!</i>	Straight edge, protractor, compass, Mira (optional)
Translations	Straight edge, patty paper or tracing paper, graph paper
Rotations	Straight edge, patty paper or tracing paper, graph paper, compass, protractor
<i>Activity: Tantalizing Tessellations</i>	3"x5" plain index cards, scissors, cello tape, straight edge, colored markers, map colors, or crayons, poster paper for mounting designs, pattern blocks, patty paper or tracing paper, 8 1/2"x11" paper

<b>Section 5- Transformations (dilations)</b>	
<i>Activity: Set the Sails</i>	TI-83+ graphing calculators with Cabri Junior™ software, grid paper (optional), straight edge, patty paper or tracing paper, sharp pencils
Dilations	Straight edge, patty paper or tracing paper, graph paper, protractor, ruler
<i>Activity: Shadows on the Wall</i>	Grid paper, straight edge, calculator, patty paper or tracing paper
<b>Section 6- Trigonometry</b>	
Right Triangle Trigonometry	Graphing calculator or scientific calculator
The Unit Circle	Graphing calculator or scientific calculator