

**Geometry – Understanding Your Child’s Performance:** Below is a summary of skills and knowledge students must demonstrate to achieve each performance level. A student should demonstrate mastery of knowledge and skills within his/her achievement level *as well as* all content and skills that precede it. For example, a Proficient Learner should also possess the knowledge and skills of a Developing Learner *and* a Beginning Learner.

	Beginning Learner	Developing Learner	Proficient Learner	Distinguished Learner
<b>End-of-Course Geometry</b>	<p>In general, your child can:</p> <ul style="list-style-type: none"> <li>• identify and construct angles, circles, perpendicular lines, parallel lines, and line segments</li> <li>• identify rigid transformations</li> <li>• identify similar figures</li> <li>• use the Pythagorean Theorem</li> <li>• calculate the circumference and area of a circle</li> <li>• identify the center and radius of a circle from a graph</li> <li>• calculate volume</li> <li>• calculate the probability of independent events</li> </ul>	<p>In general, your child can:</p> <ul style="list-style-type: none"> <li>• represent transformations in the coordinate plane</li> <li>• use transformations in the coordinate plane to show congruence</li> <li>• identify geometric constructions</li> <li>• identify similarity transformations</li> <li>• use trigonometric ratios to solve simple problems with right triangles</li> <li>• find simple arc lengths and areas of sectors of a circle</li> <li>• identify the center and radius of a circle from an equation</li> <li>• use volume formulas to solve problems</li> <li>• visualize 2-D and 3-D objects</li> <li>• calculate the probabilities of independent and dependent events</li> </ul>	<p>In general, your child can:</p> <ul style="list-style-type: none"> <li>• experiment with transformations in the coordinate plane</li> <li>• use coordinates to prove simple geometric theorems algebraically</li> <li>• prove geometric theorems</li> <li>• make geometric constructions</li> <li>• prove theorems involving similarity</li> <li>• define trigonometric ratios</li> <li>• understand and apply circle theorems</li> <li>• explain the use of volume formulas</li> <li>• apply geometric concepts to model a situation</li> <li>• represent and interpret data on two categorical and quantitative variables</li> <li>• compute probabilities of compound events</li> </ul>	<p>In general, your child can:</p> <ul style="list-style-type: none"> <li>• interpret transformations to analyze congruence</li> <li>• analyze why figures are congruent after a rigid transformation</li> <li>• use geometric constructions to solve real-world problems</li> <li>• analyze similarity transformations</li> <li>• solve multistep problems involving right triangles</li> <li>• use circle theorems in context</li> <li>• use volume formulas to solve complex problems</li> <li>• interpret independence and conditional probability</li> </ul>