

Geometry Semester 1

Week (dates or numbers)	Standards (NVACS) Both academic and practice standards/Essential Skills/Objectives	Lesson (Using Illustrative Mathematics Curriculum)	Activities	Assessments
Week 1	-HSG-CO.A.5 Given a geometric figure and a rotation, reflection, or translation, draw the transformed figure using, e.g., graph paper, tracing paper, or geometry software. Specify a sequence of transformations that will carry a given figure onto another.	Geo. 1.10	1. Daily Warm-ups 2. Student Lecture Notes in class throughout the week (M-Th) 3. Extra Practice/Homework assigned on Monday, turned in on Thursday prior to quiz/cool down and reviewed on following Monday	1. Weekly Quiz/Cool Down Thursday (15 minutes before class ends) 2. Friday Check-Ins (Check for understanding question taken from weekly notes.)
Week 2	-HSG-CO.A.3 Given a rectangle, parallelogram, trapezoid, or regular polygon, describes the rotations and reflections that carry it onto itself.	Geo. 1.15	1. Daily Warm-ups 2. Student Lecture Notes in class throughout the week (M-Th) 3. Extra Practice/Homework assigned on Monday, turned in on Thursday prior to quiz/cool down and reviewed on following Monday	1. Weekly Quiz/Cool Down Thursday (15 minutes before class ends) 2. Friday Check-Ins (Check for understanding question taken from weekly notes.)
Week 3	-HSG-CO.C.10 Prove theorems about triangles. Theorems include: measures of interior angles of a triangle sum to 180° ; base angles of isosceles triangles are congruent; the segment joining midpoints of two sides of a triangle is parallel to the third side and half the length; the medians of a triangle meet at a point. -HSG-CO.C.11 Prove theorems about parallelograms. Theorems include: opposite sides are congruent, opposite angles are congruent, the diagonals of a parallelogram bisect each other, and conversely, rectangles are parallelograms with congruent diagonals	Geo. 2.6	1. Daily Warm-ups 2. Student Lecture Notes in class throughout the week (M-Th) 3. Extra Practice/Homework assigned on Monday, turned in on Thursday prior to quiz/cool down and reviewed on following Monday	1. Weekly Quiz/Cool Down Thursday (15 minutes before class ends) 2. Friday Check-Ins (Check for understanding question taken from weekly notes.)
Week 4	-HSG-SRT.A.2 Given two figures, use the definition of similarity in terms of similarity transformations to decide if they are similar; explain using similarity transformations the meaning of similarity for triangles as the equality of all corresponding pairs of angles and the proportionality of all corresponding pairs of sides. -HSG-SRT.B.5 Use congruence and similarity criteria for triangles to solve problems and to prove relationships in geometric figures.	Geo. 3.6	1. Daily Warm-ups 2. Student Lecture Notes in class throughout the week (M-Th) 3. Extra Practice/Homework assigned on Monday, turned in on Thursday prior to quiz/cool down and reviewed on following Monday	1. Weekly Quiz/Cool Down Thursday (15 minutes before class ends) 2. Friday Check-Ins (Check for understanding question taken from weekly notes.)
Week 5	-HSG-SRT.B.5 Use congruence and similarity criteria for triangles to solve problems and to prove relationships in geometric figures.	Geo. 3.12	1. Daily Warm-ups 2. Student Lecture Notes in class throughout the week (M-Th) 3. Extra Practice/Homework assigned on Monday, turned in on Thursday prior to quiz/cool down and reviewed on following Monday	1. Weekly Quiz/Cool Down Thursday (15 minutes before class ends) 2. Friday Check-Ins (Check for understanding question taken from weekly notes.)
Week 6	-HSG-SRT.B.5 Use congruence and similarity criteria for triangles to solve problems and to prove relationships in geometric figures.	Geo. 4.1	1. Daily Warm-ups 2. Student Lecture Notes in class throughout the week (M-Th) 3. Extra Practice/Homework assigned on Monday, turned in on Thursday prior to quiz/cool down and reviewed on following Monday	1. Weekly Quiz/Cool Down Thursday (15 minutes before class ends) 2. Friday Check-Ins (Check for understanding question taken from weekly notes.)
Week 7	-HSG-SRT.C.7 Explain and use the relationship between the sine and cosine of complementary angles.	Geo. 4.8	1. Daily Warm-ups 2. Student Lecture Notes in class throughout the week (M-Th) 3. Extra Practice/Homework assigned on Monday, turned in on Thursday prior to quiz/cool down and reviewed on following Monday	1. Weekly Quiz/Cool Down Thursday (15 minutes before class ends) 2. Friday Check-Ins (Check for understanding question taken from weekly notes.)
Week 8	-HSG-SRT.C.8 Use trigonometric ratios and the Pythagorean Theorem to solve right triangles in applied problems. ★	Geo. 4.10	1. Daily Warm-ups 2. Student Lecture Notes in class throughout the week (M-Th) 3. Extra Practice/Homework assigned on Monday, turned in on Thursday prior to quiz/cool down and reviewed on following Monday	1. Weekly Quiz/Cool Down Thursday (15 minutes before class ends) 2. Friday Check-Ins (Check for understanding question taken from weekly notes.)
Week 9	Midterm/Final Review		1. Daily Warm Up 2. Monday H/W Review 3. Tuesday/Wednesday Exam Review	1. Exam 2. ACT/Brilliant Practice

Geometry Semester 2

Week (dates or numbers)	Standards (NVACS) Both academic and practice standards/Essential Skills/Objectives	Lesson (Using Illustrative Mathematics Curriculum)	Activities	Assessments
Week 1	<p>-HSG-SRT.C.8 Use trigonometric ratios and the Pythagorean Theorem to solve right triangles in applied problems. ★</p> <p>-HSG-GMD.A.3 Use volume formulas for cylinders, pyramids, cones, and spheres to solve problems. ★</p>	Geo. 5.11	<ol style="list-style-type: none"> 1. Daily Warm-ups 2. Student Lecture Notes in class throughout the week (M-Th) 3. Extra Practice/Homework assigned on Monday, turned in on Thursday prior to quiz/cool down and reviewed on following Monday 	<ol style="list-style-type: none"> 1. Weekly Quiz/Cool Down Thursday (15 minutes before class ends) 2. Friday Check-Ins (Check for understanding question taken from weekly notes.)
Week 2	<p>-HSG.GMD.A.1 Give an informal argument for the formulas for the circumference of a circle, area of a circle, volume of a cylinder, pyramid, and cone. Use dissection arguments, Cavalieri's principle, and informal limit arguments.</p>	Geo. 5.13	<ol style="list-style-type: none"> 1. Daily Warm-ups 2. Student Lecture Notes in class throughout the week (M-Th) 3. Extra Practice/Homework assigned on Monday, turned in on Thursday prior to quiz/cool down and reviewed on following Monday 	<ol style="list-style-type: none"> 1. Weekly Quiz/Cool Down Thursday (15 minutes before class ends) 2. Friday Check-Ins (Check for understanding question taken from weekly notes.)
Week 3	<p>-HSG-C.A.2 Identify and describe relationships among inscribed angles, radii, and chords. Include the relationship between central, inscribed, and circumscribed angles; inscribed angles on a diameter are right angles; the radius of a circle is perpendicular to the tangent where the radius intersects the circle.</p> <p>-HSG-GPE.B.4 Use coordinates to prove simple geometric theorems algebraically. For example, prove or disprove that a figure defined by four given points in the coordinate plane is a rectangle; prove or disprove that the point $(1, \sqrt{3})$ lies on the circle centered at the origin and containing the point $(0, 2)$.</p> <p>-HSG-GPE.B.5 Prove the slope criteria for parallel and perpendicular lines and use them to solve geometric problems (e.g., find the equation of a line parallel or perpendicular to a given line that passes through a given point).</p> <p>-HSG-GPE.B.7 Use coordinates to compute perimeters of polygons and areas of triangles and rectangles, e.g., using the distance formula. ★</p>	Geo. 6.14	<ol style="list-style-type: none"> 1. Daily Warm-ups 2. Student Lecture Notes in class throughout the week (M-Th) 3. Extra Practice/Homework assigned on Monday, turned in on Thursday prior to quiz/cool down and reviewed on following Monday 	<ol style="list-style-type: none"> 1. Weekly Quiz/Cool Down Thursday (15 minutes before class ends) 2. Friday Check-Ins (Check for understanding question taken from weekly notes.)
Week 4	<p>-HSG-C.A.3 Construct the inscribed and circumscribed circles of a triangle, and prove properties of angles for a quadrilateral inscribed in a circle.</p>	Geo. 7.4	<ol style="list-style-type: none"> 1. Daily Warm-ups 2. Student Lecture Notes in class throughout the week (M-Th) 3. Extra Practice/Homework assigned on Monday, turned in on Thursday prior to quiz/cool down and reviewed on following Monday 	<ol style="list-style-type: none"> 1. Weekly Quiz/Cool Down Thursday (15 minutes before class ends) 2. Friday Check-Ins (Check for understanding question taken from weekly notes.)
Week 5	<p>-S-CP.A.2 Understand that two events A and B are independent if the probability of A and B occurring together is the product of their probabilities, and use this characterization to determine if they are independent.</p>	Geo. 8.4	<ol style="list-style-type: none"> 1. Daily Warm-ups 2. Student Lecture Notes in class throughout the week (M-Th) 3. Extra Practice/Homework assigned on Monday, turned in on Thursday prior to quiz/cool down and reviewed on following Monday 	<ol style="list-style-type: none"> 1. Weekly Quiz/Cool Down Thursday (15 minutes before class ends) 2. Friday Check-Ins (Check for understanding question taken from weekly notes.)
Week 6	<p>-S-CP.A.3 Understand the conditional probability of A given B as $P(A \text{ and } B)/P(B)$, and interpret independence of A and B as saying that the conditional probability of A given B is the same as the probability of A, and the conditional probability of B given A is the same as the probability of B.</p>	Geo. 8.6	<ol style="list-style-type: none"> 1. Daily Warm-ups 2. Student Lecture Notes in class throughout the week (M-Th) 3. Extra Practice/Homework assigned on Monday, turned in on Thursday prior to quiz/cool down and reviewed on following Monday 	<ol style="list-style-type: none"> 1. Weekly Quiz/Cool Down Thursday (15 minutes before class ends) 2. Friday Check-Ins (Check for understanding question taken from weekly notes.)
Week 7	<p>-S-CP.A.4 Construct and interpret two-way frequency tables of data when two categories are associated with each object being classified. Use the two-way table as a sample space to decide if events are independent and to approximate conditional probabilities. For example, collect data from a random sample of students in your school on their favorite subject among math, science, and English. Estimate the probability that a randomly selected student from your school will favor science given that the student is in tenth grade. Do the same for other subjects and compare the results.</p>	Geo. 8.9	<ol style="list-style-type: none"> 1. Daily Warm-ups 2. Student Lecture Notes in class throughout the week (M-Th) 3. Extra Practice/Homework assigned on Monday, turned in on Thursday prior to quiz/cool down and reviewed on following Monday 	<ol style="list-style-type: none"> 1. Weekly Quiz/Cool Down Thursday (15 minutes before class ends) 2. Friday Check-Ins (Check for understanding question taken from weekly notes.)
Week 8	<p>S-CP.B.7 Apply the Addition Rule, $P(A \text{ or } B) = P(A) + P(B) - P(A \text{ and } B)$, and interpret the answer in terms of the model.</p>	Geo. 8.11	<ol style="list-style-type: none"> 1. Daily Warm-ups 2. Student Lecture Notes in class throughout the week (M-Th) 3. Extra Practice/Homework assigned on Monday, turned in on Thursday prior to quiz/cool down and reviewed on following Monday 	<ol style="list-style-type: none"> 1. Weekly Quiz/Cool Down Thursday (15 minutes before class ends) 2. Friday Check-Ins (Check for understanding question taken from weekly notes.)

Week 9	Midterm/Final Reveiw	1. Daily Warm Ups 2. Monday H/W Reveiw 3. Tuesday/Wednesday Exam Reveiw	1. Exam 2. ACT/Brilliant Practice