# Geometry Syllabus, 2nd Semester (correlation to Common Core, Geometry)

# Geometry)Unit 10: Areas of regular polygons

Lesson 01: Areas of regular (equilateral) triangles G-GPe-7 Lesson 02: Areas of regular quadrilaterals (squares) G-GPe-7 Lesson 03: Areas of regular hexagons G-GPe-7 Lesson 04: General area of regular polygons G-GPe-7 Lesson 05: Effects of dimension and area changes G-Gmd-2 Cumulative review Unit 11 review

Unit 11 test

### Unit 11: Three dimensional objects

Lesson 01: Three dimensional drawings and views G-Gmd-1,-2,-3,-4

Lesson 02: Prisms and nets G-Gmd-1,-2,-3,-4

Lesson 03: Areas and volumes of prisms G-Gmd-1,-2,-3

Lesson 04: More areas and volumes of prisms G-Gmd-1,-2,-3

Lesson 05: Effects of dimension, area, and volume changes G-Gmd—2,3 Units conversions

Cumulative review G-Gmd-3 Unit 12 review Unit 12 test

### Unit 12: Pyramids

Lesson 01: Pyramid fundamentals and associated nets G-Gmd-1,-2,-3; G-GPe-7

Lesson 02: Surface areas and volumes of pyramids G-Gmd-1,-2,-3

Lesson 03: More practice with areas and volumes of pyramids G-Gmd-1,-2,-3

Lesson 04: Effects of dimension, area, and volume changes G-Gmd-1,-2,-3

Cumulative review G-GP-e-4, G-Gmd-3 Unit 13 review Unit 13 test

#### Unit 13: Circles

Lesson 01: Circle fundamental G-Co-1, G-GMD-1

Lesson 02: Shaded area involving circles G-Co-1, G-GMD-1

Lesson 03: Circle equations and inequalities G-GP-e-4

Lesson 04: Tangents G-C-2,-4

Cumulative review Unit 14 review Unit 14 test

#### Unit 14: Cylinders, cones, and spheres

Lesson 01: Cylinder fundamentals (area and volume) G-Gmd1,2,3; G-MG-3

Lesson 02: Cone fundamentals (area and volume) G-Gmd1,3

Lesson 03: Sphere fundamentals (area and volume) **G-Gmd1,3; G-Gmd4** Rotation of two-dimensional objects; cross sections

Cumulative review Unit 15 review Unit 15 test

## Unit 15: Arcs, chords, central angles Sector and segment area

Lesson 1: Arcs, semicircles, and central angles G-Co-1, -2

Lesson 2: Arcs and chords G-Co-1, -2; G-C5

- Lesson 3: Arc length, sector area, and segment areas G-Co-1, -2; G-C5
- Lesson 6: Area probability problems G-Co-1, -2 Construction: Circumscribing a triangle with a circle G-Co-12

Cumulative review Unit 16 review Unit 16 test

#### Unit 16: Inscribed angles and angles formed by secants & tangents

Lesson 1: Inscribed angle G-C-1,-2,-3,-4,-5

- Lesson 2: Angles formed by secants and tangents G-C-1,-2,-3,-4,-5
- Lesson 3: More practice with inscribed angles and angles formed by secants and tangents
- Lesson 4: Special line segments associated with a circle G-C-4
- Lesson 5: More practice with special segments G-C-1,-2,-3,-4,-5
- Lesson 6: Construction: Inscribing circles inside triangles and regular polygons

#### G-C-3

Cumulative review Unit 17 review Unit 17 test

### Unit 17: Transformations; rigid motions Slope relationships between lines

Lesson 1: Translations G-Co-1,2,3,5,6

Lesson 2: Reflections G-Co-3,5,6

- Lesson 3: Rotations G-Co-3,5,6
- Lesson 4: Patterns G-Co-12
- Lesson 5: Parallel and perpendicular lines G-GPe-5

Cumulative review Unit 17 review Unit 17 test

#### Unit 18: Logic and Proofs (SSS, SAS, & ASA)

Lesson 1: Conditional statements G-CO-9,-10,-11

- Lesson 2: Introduction to two column proofs G-C0-9,-10,-11 Algebraic proofs
- Lesson 3: Corresponding parts of congruent triangles G-Co-6,7,8

Lesson 4: Using SSS, SAS, & ASA with congruent triangles G-Co-6,7,8

Lesson 5: Using SSS, SAS, & ASA to prove triangles congruent G-Co-6,7,8

Unit 18 review Unit 18 test

## Semester summary

Semester review Semester test