

cK12.org Flexbook Links to Support Curriculum 2.0 Geometry and Honors Geometry

This document outlines concepts in each Topic for the Unit. When corresponding resources are available in cK12.org, a hyperlink is provided for the Flexbook. The cK12.org Flexbooks provide a variety of examples, definitions, and extra practice problems related to some of the concepts in Curriculum 2.0 Geometry and Honors Geometry. The concepts will be developed in greater depth and with appropriate vocabulary in the classroom. The materials in the Flexbooks are intended to provide additional support to the classroom expectations. The vocabulary and methods in these examples may differ slightly from the classroom expectation; however, the overall intent is consistent with the content expectation.

Unit 5: Circles

Topic 1: Circles and Angles

- Prove that all circles are similar by using dilations and relationships between parts of a circle. ([cK-12 Flexbook Unit 5 Topic 1 SLT 1](#))
- Identify and describe relationships among angles, radii, and chords. ([cK – 12 Flexbook Unit 5 Topic 1 SLT 2](#))
- Determine relationships between radii, chords, and tangents. ([cK – 12 Flexbook Unit 5 Topic 1 SLT 3](#))
- Determine missing measurements by using the relationships among central angles, inscribed angles, and the arcs they intercept. ([cK – 12 Flexbook Unit 5 Topic 1 SLT 4](#), [cK-12 Flexbook Unit 5 Topic 1 SLTs 5 & 6](#))
- Using definitions, properties, and theorems, prove properties of angles for polygons inscribed in a circle. ([cK-12 Flexbook Unit 5 Topic 1 SLT 8](#))
- Construct the circumcenter of a triangle to circumscribe a circle about a triangle. ([cK – 12 Flexbook Unit 5 Topic 1 SLT 9](#))
- Construct the incenter of a triangle to inscribe a circle within a triangle. ([cK – 12 Flexbook Unit 5 Topic 1 SLT 10](#))
- Use points of concurrency to solve real world problems.

Topic 2: Arc Length and Area

- Derive the constant of proportionality between arc length and radii (radian measure). ([cK – 12 Flexbook Unit 5 Topic 2 SLTs 13 & 14](#))
- Find the arc length of a circle. ([cK – 12 Flexbook Unit 5 Topic 2 SLT 15](#))
- Using similarity, derive the formula for the area of a sector. ([cK – 12 Flexbook Unit 5 Topic 2 SLT 16](#))
- Find the area of a sector and segment in a circle. ([cK-12 Flexbook Unit 5 Topic 2 SLTs 17 & 18](#))