Geometric Construction

Students who study geometric construction are learning to answer the questions

How could early civilizations produce accurate measures without our technology? What conditions are necessary for two triangles to be congruent? What would it mean for a point to be considered the center of a triangle?

This unit of study addresses Indiana College & Career Ready Standards as a bridge between sixth and seventh grade standards and future studies in high school geometry.

Gaining skills in this unit will enable students to do everyday tasks like copying a diagram from a magazine or manual, determining cut locations for a piece of drywall, or maximizing space in a storage area. The specific skills in this unit of study include

- copying a segment
- copying an angle
- bisecting a segment
- bisecting an angle
- · constructing a parallel line
- · constructing a perpendicular line
- copying a triangle through side-side-side congruence
- copying a triangle through angle-side-angle congruence
- copying a triangle through side-angle-side congruence
- constructing a circumcenter
- constructing an incenter
- · constructing a centroid