

# Quebec - Achievements and Competencies

## Learning Outcomes

<b>Cycle 1 (Gr. 7-8)</b>
Plane figures

The Quebec Achievements and Competencies are based on the Progression of Learning Outcomes derived from the Quebec Education Plan set by the Ministère de l'Éducation, du Loisir et du Sport.

## Specific Expectations

### **CYCLE 1 (Gr. 7-8)**

#### GEOMETRY

Spatial sense and analyzing situations involving geometric figures

#### A. Plane figures

1. Describes convex and non-convex polygons
5. Recognizes and names regular convex polygons

Students can identify the shapes and letters as convex or nonconvex by describing the lines and angles that form them. Students should be able to name the convex polygons according to the number of lines that form them.

8. Recognizes and draws main segments and lines
  - a. diagonal, altitude, median, perpendicular bisector, bisector, radius, diameter

Students should explain how bisecting angles help to align the shapes on top of each other. The students determine that the angle is halved when the angle is bisected. The lines of the shape are equidistant from the bisecting line, and thus if a shape is folded along the bisecting line, the shape lines will overlap.

9. Identifies the properties of plane figures using geometric transformations and constructions

By folding along the parallel and perpendicular lines of the figures, students can identify and describe different properties of the shapes and letters. They can observe how the shape is reflected when certain folds occur, and how this attributes to symmetry. They should use appropriate vocabulary to describe the features of the figures, before and during the folding activity.