

## **Geometry**

### **Unit: Introduction to Geometry**

#### **Section: Basic Elements of Geometry**

#### **Animation: Constructing a Perpendicular Bisector**

##### **Step 1**

Place the compass on one end of the line segment.

##### **Step 2**

Set the compass width to a approximately two thirds the line length. The actual width does not matter.

##### **Step 3**

Without changing the compass width, draw an arc above and below the line.

##### **Step 4**

Again without changing the compass width, place the compass point on the the other end of the line. Draw an arc above and below the line so that the arcs cross the first two.

##### **Step 5**

Using a straightedge, draw a line between the points where the arcs intersect.

##### **Step 6**

This line is perpendicular to the first line and bisects it (cuts it at the exact midpoint of the line).