

**Key Idea**

Geometry uses special pictures and symbols to describe ideas about space and location.

**Vocabulary**

- point
- line
- line segment
- midpoint
- plane
- ray
- parallel lines
- intersecting lines
- perpendicular lines

**Think It Through**

I need to **understand vocabulary and mathematical symbols** in order to communicate geometric ideas.

# Geometric Ideas

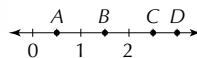
**LEARN**

## How do you represent basic geometric ideas?

Points, lines, line segments, and rays are basic geometric concepts. Artists, engineers, and architects use these concepts in the development of buildings and structures.

**WARM UP**

Which point is associated with the given number on the number line?



1. 1.5 **B**      2. 0.5 **A**  
3. 2.5 **C**      4. 3 **D**

|  | What You Draw | What You Say      | What You Write   |
|--|---------------|-------------------|--|
| A <b>point</b> is an exact location in space.  |               | "point G"         | G or Point G   |
| A <b>line</b> is a straight path of points that goes on forever in two directions.                                   |               | "line BC"         | $\overleftrightarrow{BC}$<br>(or $\overleftrightarrow{CB}$ ) |
| A <b>line segment</b> is part of a line. It has two endpoints. Its <b>midpoint</b> is halfway between the endpoints. |               | "line segment TN" | $\overline{TN}$<br>(or $\overline{NT}$ )                     |
| A <b>ray</b> is part of a line. It has one endpoint and extends forever in only one direction.                       |               | "ray JK"          | $\overrightarrow{JK}$  |
| A <b>plane</b> is an endless flat surface.   |               | "plane LMN"       | LMN  |