NAME_____

Module 8 **Points, Lines, Angles, and Triangles**
Lesson 1 **Language of Geometry**

Lesson Objectives

- Identify points, lines, planes, rays, and segments.
- Define and identify an angle.
- Label parts of an angle: vertex, rays, interior, and exterior.

Subtopic 1   Basic Terms of Geometry

Point

- A _____
- Has no size
- Represented by a _____ dot
- Named with a _____
- Used to make all other geometric figures

Line

- An infinite set of points extending in _____ directions without end
- Named by _____ points on the line

    OR

- Named by a _____ letter

Points on the _____ _____ are collinear.

Plane

- A _____ surface
- Extends infinitely in all _____
- Has no _____
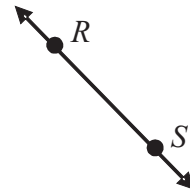- Named by a capital italicized letter

    OR

- Named by three _____ points
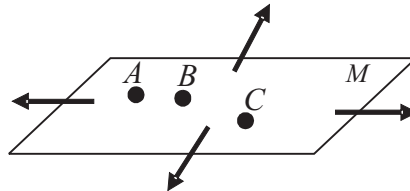
Points and _____ in the _____ plane are coplanar.

A line segment is a _____ of a line that has two endpoints.

A ray is a part of a line that has one _____ and extends infinitely in one _____.

1 Write all the ways to name the line using symbols.

2 Write all the ways to name the plane.

Tell whether the statement is true or false.

3 A point's length can be measured.

4 A line is made up of two points.

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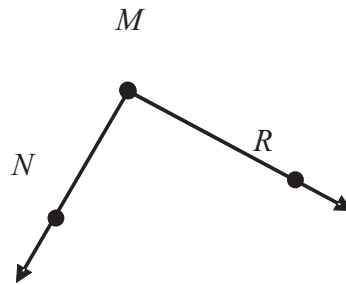
| **Subtopic 2** | **Angles** |

An angle is made up of two distinct _____ that have a common _____.

- The two rays are the _____ of the angle.

- The _____ endpoint is the vertex.

- An angle can be _____ by its vertex.

- An angle can be named using _____ points: a point on one side, the _____, and a point on the other side.
- The vertex is always the _____ letter.

- An angle can be named using a _____.

An angle separates a plane into _____ parts:

- Points that make up the angle

- Points in the _____ of the angle

- Points in the _____ of the angle

5   Name the vertex and sides of the angle.

6   Tell whether each point shown lies on the angle, in the angle's interior, or in the angle's exterior.