* The most basic figures in geometry are **undefined terms**, which cannot be defined by using other figures. The undefined terms *point*, *line*, and *plane* are the building blocks of geometry.



* Points that lie on the same line are **collinear**. *K*, *L*, and *M* are collinear. *K*, *L*, and *N* are *noncollinear*. Points that lie on the same plane are **coplanar**. Otherwise they are *noncoplanar*.



**EX 1:**



**A. Name four coplanar points.**

**B. Name three lines.**



**EX 2:** **Draw and label each of the following.**

1. **a segment with endpoints *M* and *N.***
2. **opposite rays with a common endpoint *T*.**

**EX 3:** **Draw and label a ray with endpoint *M* that**

**contains *N*.**

* A **postulate**, or *axiom*, is a statement that is accepted as true without proof. Postulates about points, lines, and planes help describe geometric properties.



**EX 4:** **Name a line that passes through two points.**



**EX 5:** **Name a plane that contains three noncollinear points.**



* An intersection is the set of all points that two or more figures have in common. The next two postulates describe intersections involving lines and planes.



* Use a dashed line to show the hidden parts of any figure that you are drawing. A dashed line will indicate the part of the figure that is not seen.

**EX 6:**

1. **Sketch two lines intersecting in exactly one point.**
2. **Sketch a figure that shows a line that lies in a plane.**

**EX 7:**  Sketch a figure that shows two lines intersect in one point in a plane, but only one of the lines lies in the plane.

**WARM UP:**