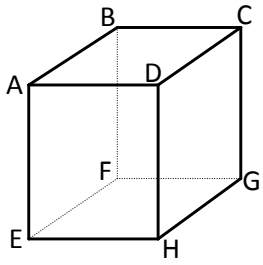
**Intro to Geometry** (G.CO.1)
**Unit 1A: Vocabulary & Notation** (IC4)

Name: _____Key_____
Date: _____ Period: _____

1. Examine the illustration. Identify the places where lines intersect each other. What kind of geometric figure is the intersection of two lines?




**POSTULATE:** The intersection of two lines is a _____Point_____.

Follow-Up Questions: How many lines intersect at each corner of the figure? ____3____

2. Identify the places in the illustration where planes intersect each other. What kind of geometric figure is the intersection of two planes?

**POSTULATE:** The intersection of two planes is a _____Line_____.

Follow-Up Questions: How many planes intersect at each corner of the figure? ____3____

The intersection of three planes is a _____Point_____.

3. Look at A and B in the illustration. How many lines pass through both of these points? ____1____

**POSTULATE:** Through any two points there is _____exactly one line_____.

Follow-Up Questions: How many points are on a line? _____Infinite_____

How many points are used to name a line? _____2_____

4. Look at A, B, and C in the illustration. How many planes pass through these three non-collinear points? _____1_____

**POSTULATE:** Through any three non-collinear points there is _____Exactly one plane_____.

Follow-Up Questions: How many points are in a plane? _____Infinite_____

How many points are used to name a plane? _____3_____

How many lines are in a plane? _____infinite_____

5. Pick any plane in the illustration. Then pick two points that are in the plane. Name the line that passes through these two points. _____$\overleftrightarrow{AD}$_____ Is the line in the plane that you picked? _____yes_____

**POSTULATE:** If two points are in a plane, then the line containing them _____Is also in the plane_____.