GEOMETRY: UNIT 2

VOCABULARY

WARM-UP

Draw and label a diagram for each figure.

1. $< ACB$

2. $a \parallel b$

3. $c \perp d$

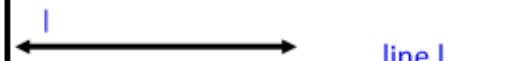
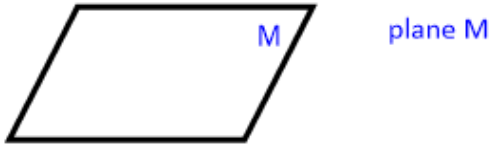
4. A line where points x, y and z are coplanar.

GEOMETRIC VOCABULARY

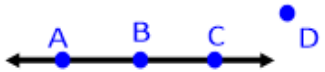
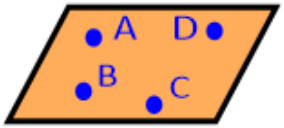
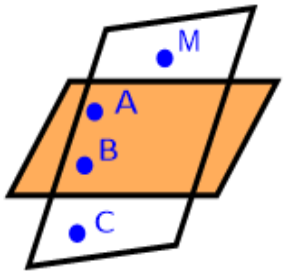
- **Content Objective:** Students will be able to identify, sketch, and label diagrams involving points, lines, planes, and angles.

- **Language Objective:** Students will be able to use symbolic notation to label, in writing, diagrams involving points, lines, planes, and angles.

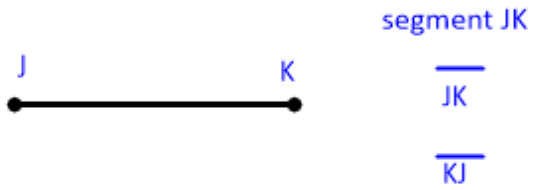
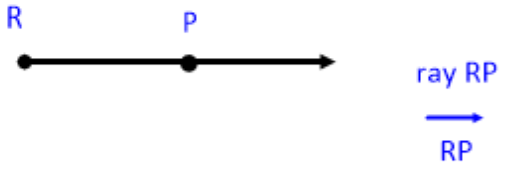
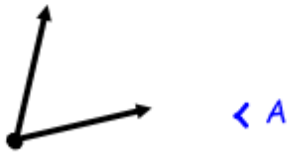
BASIC TERMS

word	definition	drawing/example
point	dimension = 0 represented by a dot	
line	dimension = 1 represented by a straight line with two arrows goes on forever both directions	
plane	dimension = 2 flat surface that extends in all directions	

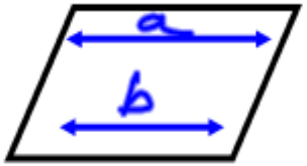
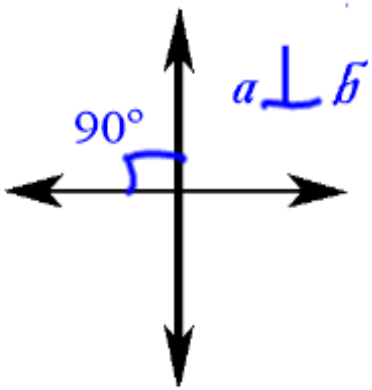
BASIC TERMS CONTINUED

word	definition	drawing/example
collinear	a set of points that all lie on one line.	 Points A, B, and C are collinear. Points A, B, and D are not collinear, also known as noncollinear.
coplanar	a set of points that all lie in one plane.	
noncoplanar	a set of points that do not lie in one plane.	

BASIC TERMS CONTINUED

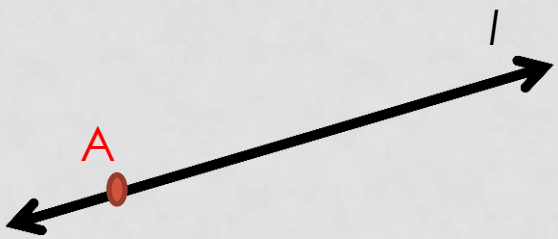
word	definition	drawing/example
segment	a part of a line that has two endpoints	
ray	part of a line that has one endpoint goes on forever in one direction	
angle	two different rays connected at the same endpoint called vertex.	

BASIC TERMS CONTINUED

word	definition	drawing/example
parallel lines	2 lines that do not intersect and are coplanar	 $a \parallel б$
perpendicular lines	2 lines that intersect to form right angles	

INTERSECTING LINES

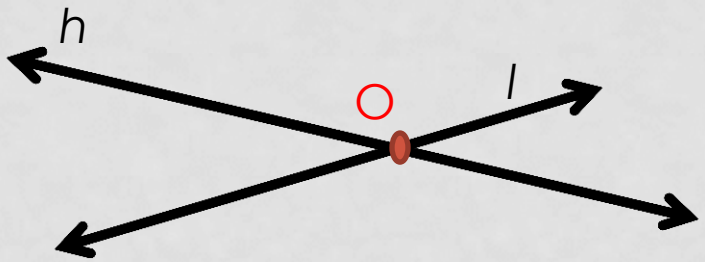
- The intersection of two figures is the set of points that are in both figures.



- *A* is in *l*, or A is on *l*.

l contains *A*.

l passes through *A*.



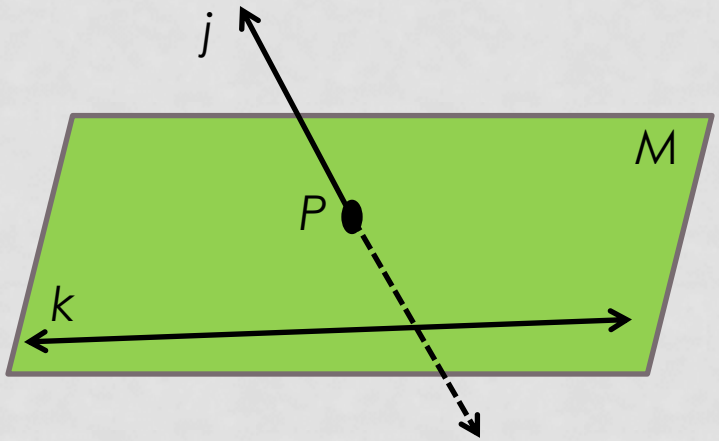
- *l* and *h* intersect in *O*.

l and h intersect a*t O*.

O is the intersection of *l* and *h*.

INTERSECTING PLANES

Similar Intersections can occur between a lines and a plane, or between two planes

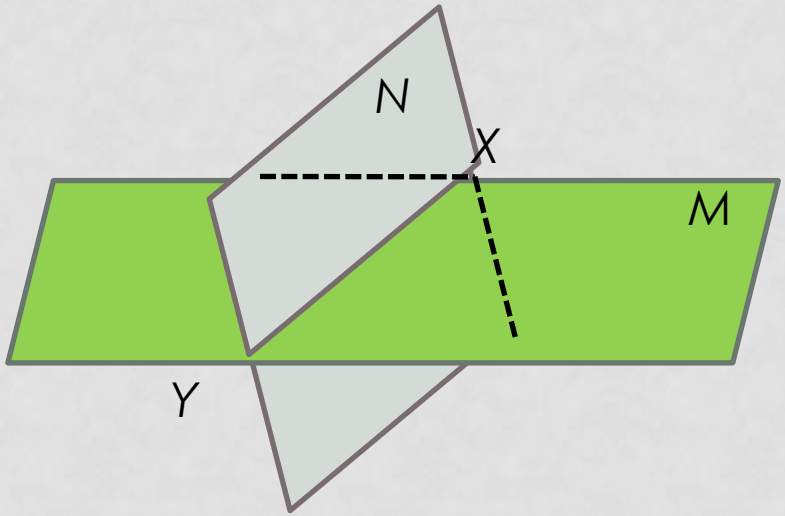


- *k* and *P* are in *M*.

M contains *k* and *P*.

j intersects *M* at *P*.

P is the intersection of *j* and *M*.



- *M* and *N* intersect in $\overleftrightarrow{XY}$.

$\overleftrightarrow{XY}$ is the intersection of M and N.

$\overleftrightarrow{XY}$ is in *M* and *N*.

EXAMPLES IN THE REAL WORLD: #1

- Look at the image. Tell me how many examples you can find of the terms you have been given?

EXAMPLES IN THE REAL WORLD: #2

- Look at the image. Tell me how many examples you can find of the terms you have been given?

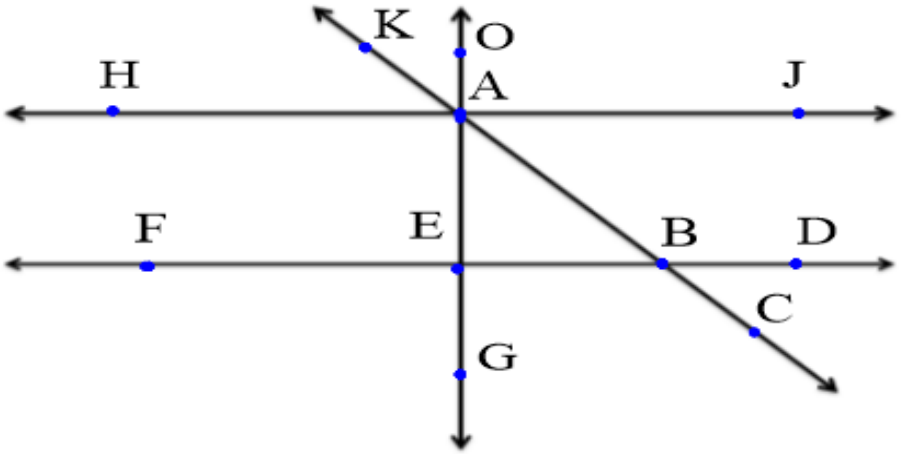
EXAMPLES IN THE REAL WORLD: #3

- Look at the image. Tell me how many examples you can find of the terms you have been given?

EXAMPLES IN THE REAL WORLD: #4

- Look at the image. Tell me how many examples you can find of the terms you have been given?

USING THE DIAGRAM GIVEN, GIVE THE FOLLOWING



5. Parallel Lines.

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6. Perpendicular lines.

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7. Four collinear points.

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8. Three angles with vertex A.

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9. Three angles using the point B.

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