

8/27/19 - Warm Up Problem

1. Name the intersection of lines p and q .

F

2. Name three points that are collinear.

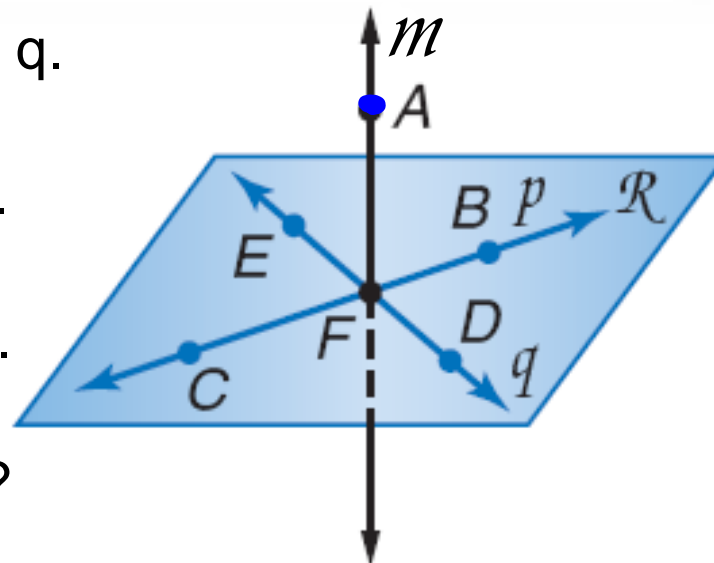
C, F, B

3. Name 4 points that are noncoplanar.

A, C, E, B

4. What is another way to name line p ?

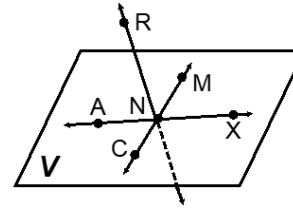
\overleftrightarrow{BC}



Concept 1 Worksheet - due Friday

POINTS LINES AND PLANES

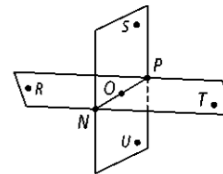
Use the figure below for Exercises 1–8. Note that \overline{RN} goes through the plane at N .



1. What is the intersection of \overline{CM} and \overline{RN} ?
2. Name three points that are collinear.
3. What is another way to name plane V ?
4. What is another way to name \overline{CM} ?
5. Which point is not contained in Plane V ?
6. Name the line that contains point A .
7. Is it possible for one line to be shorter in length than another? Explain.
8. Two points are in Plane P . Explain why the line containing the two points must also be in Plane P .

Postulate 1-4 states that any three noncollinear points lie in one plane. Find the plane that contains the first three points listed. Then determine whether the fourth point is in that plane. Write *coplanar* or *noncoplanar* to describe the points.

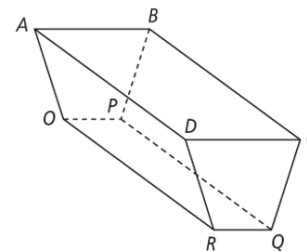
- | | |
|------------------|------------------|
| 9. P, T, R, N | 10. P, O, S, N |
| 11. T, R, N, U | 12. P, O, R, S |



Name the intersection of each pair of planes or lines.

Remember: Two lines intersect in exactly 1 point, but two planes intersect in exactly 1 line.

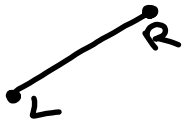
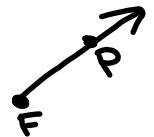
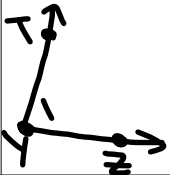
13. planes AOR and QRO
14. \overline{RO} and \overline{RO}
15. planes ADR and DCQ
16. planes BCD and BCQ
17. \overline{OP} and \overline{QP}
18. planes ABP and BCD



Concept 1 - Define Geometric Figures

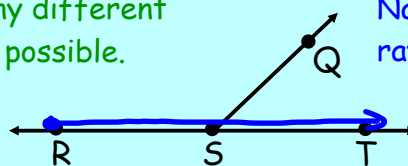
Goal: Define and name segments, rays, and angles. Use the figures we have already learned to define more related geometric figures.

More Basic Geometric Figures

SEGMENT		Named by the letters of its endpoints - must use <i>segment</i> symbol \overline{LR}	A part of a line consisting of 2 endpoints and all the points in between.
RAY		Named by its endpoint followed by one other point on the ray - must use <i>ray</i> symbol \overrightarrow{PQ}	A part of a line consisting of 1 endpoint and all the points that lie on one side.
ANGLE		Named by 3 points. - must use <i>angle</i> symbol - vertex must be in the middle $\angle TYZ$ Also can be named with a number. $\angle 1$	Two rays that share an endpoint.

Name as many different segments as possible.

\overline{RS}
 \overline{ST}
 \overline{RT}
 \overline{RS}
 \overline{ST}
 \overline{RT}



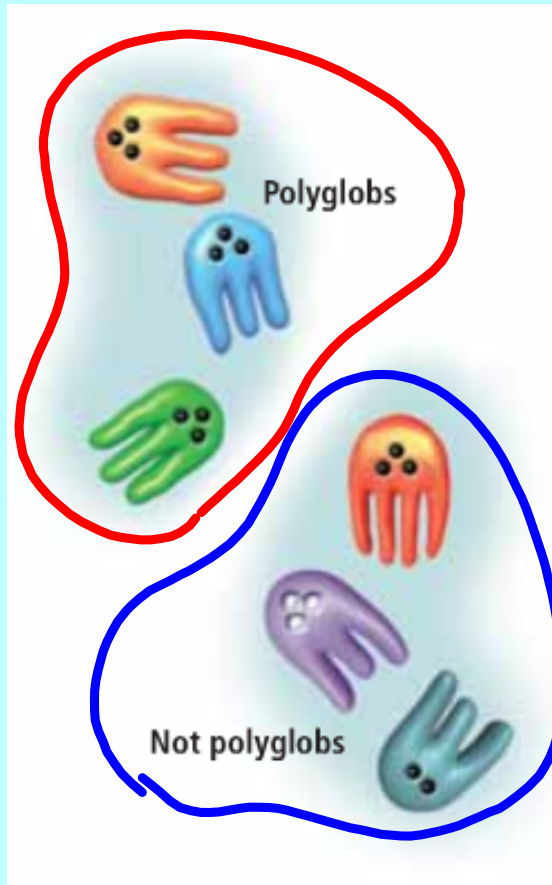
Name as many different rays as possible.

\overrightarrow{RS}
 \overrightarrow{ST}
 \overrightarrow{RT}
 \overrightarrow{SR}
 \overrightarrow{TS}
 \overrightarrow{TR}

Name as many different angles as possible.
 $\angle RST$ $\angle LRSQ$
 $\angle RST$

Tips for Writing a Good Definition

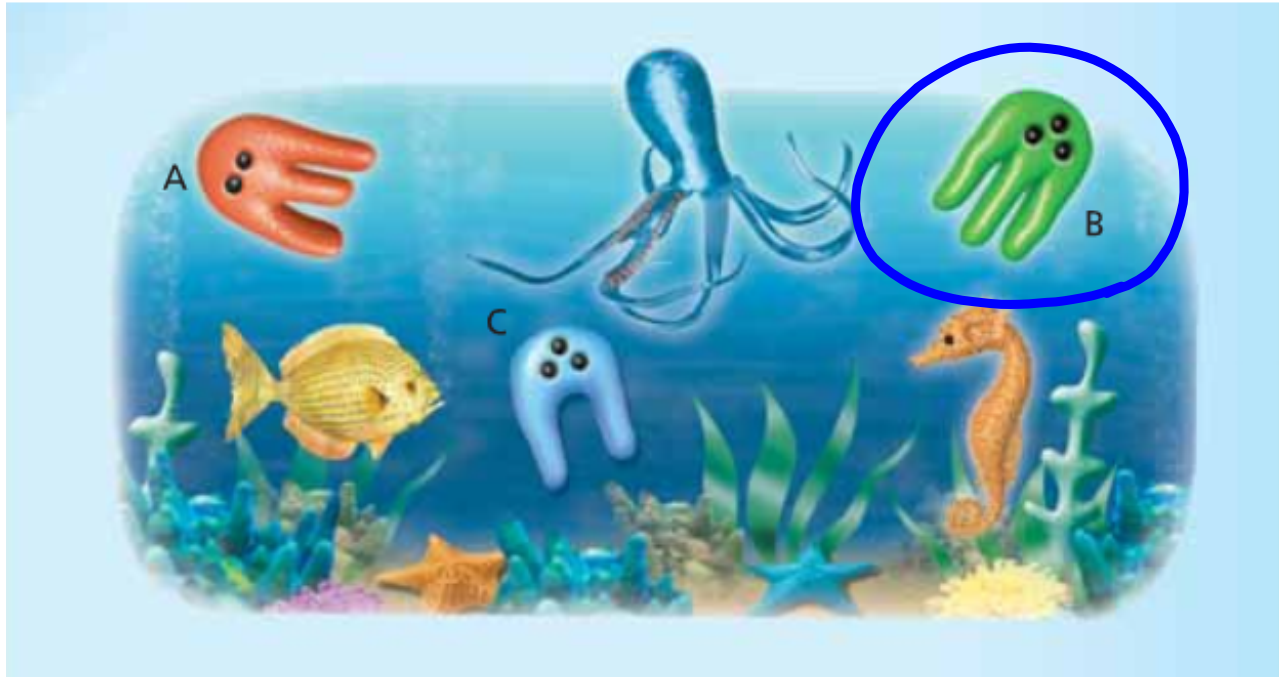
- be precise
- use commonly understood or already defined terms
- your definition should not fit any counterexamples



Define a polyglob.

a creature w/
3 black eyes and
3 same length
legs

Which ones are polyglobs?



Was your definition precise enough?

Put your name on the front of your note-taking guide.

Put it in the basket on the back table.

I will hand your notes back to you tomorrow.

No assignment today!