NAME_____**DATE**_____**PER.**_____

1.1 POINTS, LINES, & PLANES

State whether each best models a *point, line*, or *plane*.

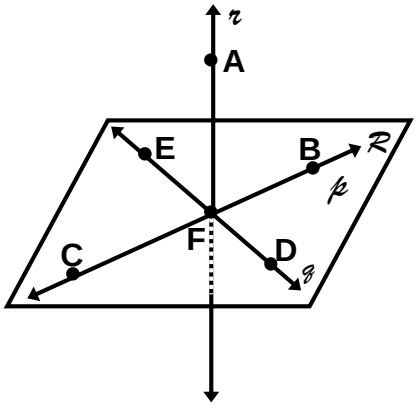
1. a taut piece of thread: _____
2. a knot in a piece of thread: _____
3. a piece of cloth: _____
4. the corner of a room: _____
5. the blue rules on your notebook paper: _____
6. your desktop: _____
7. each color dot, or pixel, on a video-game screen: _____
8. a telecommunications beam to a satellite in space:_____
9. the crease in a folded sheet of wrapping paper: _____

Refer to the figure at right to name each of the following.

10. a line containing point A:_____
11. a line passing through B:_____
12. two points collinear with point D:_____
13. two points coplanar with point B:_____
14. a plane containing points B, C, and E:

    _____
15. a plane containing lines $\mathscr{p}$ and $\mathscr{q}$:

    _____



Refer to the figure below to answer each question. The figure is a rectangular prism formed by six planes. Only a portion of each plane is shown.

16. Name the highlighted plane in the rectangular prism:_____

17. Name two points that are coplanar with points B, H, and K:_____

18. Name two lines that intersect at E:_____

_____

19. Which two planes intersect in $\overleftrightarrow{CD}$?

_____

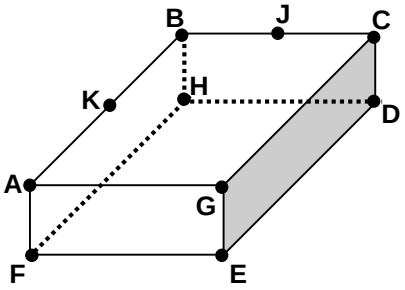
20. Name two lines that lie in plane GEC:

_____

21. Name a plane and a line that intersect at A:

_____

22. Which point(s) do planes ABC, CDE, and AGE have in common?_____



Using the figure at right, determine if each set of points is collinear.

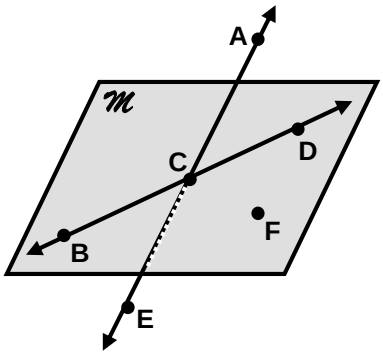
23. A, D, E Y or N

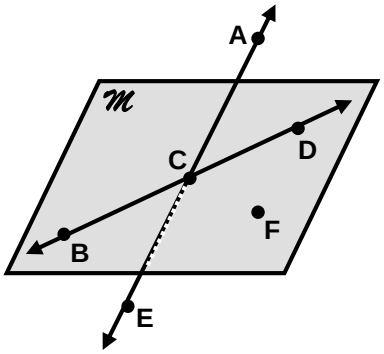
24. B, C, D Y or N

25. B, C, F Y or N

26. A, E, C Y or N

27. F, B, D Y or N





Using the figure above, answer each of the following.

28. Name plane $\mathcal{M}$ another way:_____

29. What is the intersection of plane $\mathcal{M}$ and $\overleftrightarrow{AE}$? _____
    Explain:

30. What is the intersection of $\overleftrightarrow{AE}$ and $\overleftrightarrow{BD}$? _____
    Explain:

31. Name a pair of opposite rays: _____

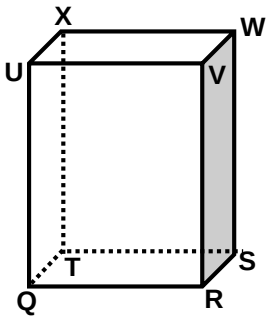
32. Name all segments ***shown*** with endpoint C._____

33. Are F and A collinear? Why or why not? _____
    _____

34. How many planes contain B, C, & D?_____
    Explain:

35. How many planes contain C, D, & F?_____
    Explain:

Using the figure at the right, answer each of the following questions.



36. What is the intersection of plane QRST and plane RSWV? _____
    Explain:

37. What is the intersection of $\overleftrightarrow{UV}$ and plane QTXU? _____
    Explain:

38. Name three lines that intersect at point S. _____

39. Name two planes that intersect at $\overleftrightarrow{TS}$. _____

40. Are Q, U, and V coplanar? Why or why not? _____

    _____

41. Do T and R determine a line? Why or why not? _____

    _____

42. Name all segments ***shown*** that contain T. _____