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## SKILL <br> Skills Readiness

## Points, Lines, and Planes

| Object | Definition | Notation |
| :--- | :--- | :---: |
| Point | A location in space that has no size. | $\cdot A$ |
| Segment | A part of a line consisting of two endpoints and all the points <br> between. | $\overrightarrow{A B}$ |
| Ray | A part of a line consisting of one endpoint and all the points <br> of the line on one side of the endpoint. | $\overrightarrow{A B}$ |
| Line | A series of points that extends without end in opposite <br> directions. | $\overleftrightarrow{A B}$ |
| Plane | A flat (two-dimensional) surface that extends without end in <br> all directions. A plane has no thickness. | $\mathscr{P}$ |

Example: Use the diagram to name a point, a segment, a ray, a line, and a plane (if possible).


Answers
Any one of the following are points: $A, B, C$, or $D$.
There are two segments: $B A$ and $B C$.
There are two rays: $\overrightarrow{B A}$ and $\overrightarrow{B C}$.
There are no lines.
There is one plane: $\mathscr{P}$

## Practice on Your Own

## Use the diagram to the right to name each of the following.

1. a point $\qquad$ 2. a line $\qquad$
2. a segment $\qquad$ 4. a ray $\qquad$
3. a plane $\qquad$ 6. a ray with endpoint $O$ $\qquad$
4. the line that passes through the point $M$ $\qquad$
5. the plane that contains the point $Q$ $\qquad$

6. a segment with one endpoint at point $O$ $\qquad$
7. the point where lines $M P$ and $O N$ meet $\qquad$

## Check

Use the diagram to the right to name each of the following.
11. two points $\qquad$ and $\qquad$
12. a segment $\qquad$
13. two rays $\qquad$ and $\qquad$
14. a line $\qquad$
15. two planes $\qquad$ and $\qquad$
16. the plane that contains line $C D$ $\qquad$


