

Chapter 2 | Geometry Language: Points, Lines, Angles, Polygons, and Solids

Worksheet A | Guided Practice

Name: _____ Grade: _____ Date: _____

Warm-up: Worked Examples

Example 1: Point, Line, Segment, or Ray

Problem: Name each object: a mark with two endpoints; a mark that goes forever in both directions; a mark with one endpoint that continues forever in one direction; a mark showing one exact location.

Two endpoints	⇔	line segment
Forever both ways	⇔	line
One endpoint, forever one way	⇔	ray
One location	⇔	point

Example 2: Identify the Vertex of an Angle

Problem: Two rays meet at point B. What is point B called?

Where rays meet	⇔	vertex
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Example 3: Decide Whether a Figure Is 2-D or 3-D

Problem: Classify a drawing of a rectangle, a cereal box, a circle, and a basketball.

Flat	⇔	rectangle, circle = 2-D
Takes up space	⇔	cereal box, basketball = 3-D

Example 4: Identify a Polygon

Problem: Decide whether a triangle, a circle, an open straight-sided shape, and a closed five-sided shape are polygons.

Closed + straight	⇔	triangle = polygon
Curved	⇔	circle = not a polygon
Not closed	⇔	open shape = not a polygon
Closed + 5 straight	⇔	pentagon

Example 5: Name a Polygon by Its Sides

Problem: A closed 2-D shape has 8 straight sides. What is its name?

Count sides	⇔	8 sides
Name	⇔	octagon

Example 6: Common-Trap Solid Vocabulary

Problem: A student points to the corner of a rectangular prism and calls it an edge. Explain the mistake.

Wrong	⇔	corner = edge
Correct	⇔	corner = vertex

Practice

1. Shows one exact location.
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2. A triangle

3. A polygon must be _____.

4. Goes forever in both directions.

5. A circle

6. A rectangle: is it 2-D or 3-D?

7. Has two endpoints.

8. A polygon is _____-D.

9. A closed shape with 5 straight sides

10. Has one endpoint and goes forever in one direction.

11. A polygon is made only of _____ sides.

12. An open shape with 4 straight sides

13. Has arrows at both ends.

14. A rectangular prism: is it 2-D or 3-D?

15. A closed shape with 3 straight sides and 1 curved side
