

# Grade 4 Math Worksheet: Understanding Shapes (Difficulty Level: Intermediate)

Name: \_\_\_\_\_ Date: \_\_\_\_\_

# **Section 1: Shape Classification**

1. Identify each shape as "2D" or "3D":

Shape	Classificatio n
Pentagon	
Sphere	
Cylinder	
Rectangle	
Triangular Prism	
Cube	

# 2. Describe the sides/surfaces of each shape:

For each shape, write if it has straight sides, curved surfaces, or both.

# **Section 2: Counting Properties**

Complete the table by counting the number of faces, edges, and vertices for each shape:

Shape	Face s	Edge s	Vertice s
Rectangular Prism			
Square Pyramid			



Cylinder		
Sphere		
Cone		

#### Answer the following questions:

- 1. Which shape has no edges or vertices?
- 2. Which shape has six faces? \_\_\_\_\_
- 3. Name two shapes with only flat surfaces.

# Section 3: Comparing Shapes

#### 1. Complete the sentences:

- A square and a cube are different because a square is \_\_\_\_\_\_ while a cube is
- A cone has \_\_\_\_\_\_ circular face(s), while a cylinder has \_\_\_\_\_\_ circular face(s).
- A sphere has \_\_\_\_\_\_ face(s), \_\_\_\_\_\_ edges, and \_\_\_\_\_\_ vertices.

#### 2. True or False:

- A rectangular prism has eight vertices.
- All 3D shapes have flat surfaces.
- A cone has one vertex. \_\_\_\_\_
- A cube has six equal faces.

## Section 4: Shapes in Real Life

1. List real-world objects that match each shape:

Shape	Example Object
Cube	
Sphere	
Cone	



Cylinder	
Rectangular Prism	

#### 2. Describe the 3D shape for each object:

- A water bottle: \_\_\_\_\_\_
- A traffic cone: \_\_\_\_\_\_
- A soccer ball: \_\_\_\_\_
- A roof with triangular sides: \_\_\_\_\_\_

# **Section 5: Drawing and Visualizing Shapes**

### 1. Draw the following shapes:

- A rectangular prism. Label its faces, edges, and vertices.
- A cone. Show its curved surface and circular base.
- A cylinder. Indicate its two circular faces and curved side.

## --BE THE CHAMPION!--