

Grade 4 Math Worksheet: Understanding Shapes (Difficulty Level: Advanced)

Name: _____

Date: _____

Section 1: Identifying and Describing Shapes

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

Shape	Classification	Key Properties (edges, faces, vertices)
Triangle		
Cylinder		
Octagon		
Sphere		
Cube		
Square Pyramid		

Section 2: Shape Properties and Analysis

1. Fill in the Table:

Shape	Faces	Edges	Vertices
Cone			
Cube			
Triangular Prism			
Cylinder			

Sphere			
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2.

Answer the Questions:

- Which shape has the fewest faces? _____
 - Which shape has no vertices or edges? _____
 - Describe how a **pyramid** and a **cube** differ in their vertices.
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Section 3: Shape Comparison and Relationships

1. **Complete the Sentences:**

- A **cylinder** has _____ circular faces and one _____ surface.
- A **cube** has _____ equal square faces and is a type of _____.

2. **Compare and Contrast:**

- Describe one similarity and one difference between a **cylinder** and a **cone**.
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Section 4: Applying Shapes to the Real World

1. **Match the Shapes:**

Shape	Real-Life Example
Cone	a) Party hat
Sphere	b) Beach ball
Cylinder	c) Soup can
Rectangular Prism	d) Book
Pyramid	e) Roof of a tent

2.

Shape Selection:

- Why is a **cone** shape useful for party hats?
- Why are **cylindrical** shapes commonly used for storing liquids?

Section 5: Drawing and Exploring Shapes

1. Draw and Label:

- Draw a **triangular prism** and label its edges and vertices.
 - Draw a **cone** and show its curved surface and circular base.
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--BE THE CHAMPION!--