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

Name: _____
Date: _____

Section 1: Shape Classification
1.   **Identify each shape as "2D" or "3D":**

Shape	Classification
Hexagon	
Rectangular Prism	
Cube	
Cone	
Circle	
Sphere	
Triangle	
Cylinder	

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

Section 2: Counting Properties
1.   **Complete the table by counting the number of faces, edges, and vertices for each shape:**

Shape	Faces	Edges	Vertices
Cube			

Triangular Prism			
Sphere			
Cone			
Square Pyramid			

2. **Answer the following questions:**

- Which shape has no vertices? _____
- Which shape has five faces? _____
- Which two shapes have only flat surfaces? _____

Section 3: Comparing Shapes

1. **Complete the sentences:**
   - A **triangle** and a **triangular prism** are different because a triangle is _____ while a triangular prism is _____.
   - A **cylinder** has _____ circular faces, while a **cone** has _____ circular face.
   - A **cube** and a **rectangular prism** both have _____ faces, but a cube has _____ equal faces.
2. **True or False?**
   - All 3D shapes have vertices. _____
   - A square pyramid has a square base. _____
   - A sphere has one face and no edges. _____
   - A cone can roll. _____

Section 4: Shapes in Real Life

1. **List real-world objects that match each shape:**
   - Sphere: _____
   - Cube: _____
   - Cone: _____
   - Cylinder: _____

    ○ Triangular Prism: _____

2. **Describe the 3D shape that best represents each of the following:**
   - A box of cereal: _____
   - A party hat: _____
   - A basketball: _____
   - A tent with a triangular base: _____

Section 5: Drawing and Visualizing Shapes

1. **Draw and Label:**
   - Draw a **triangular prism** and label its faces, edges, and vertices.
   - Draw a **cylinder** and show its two circular faces and curved surface.
   - Draw a **sphere** and describe its unique properties.

--BE THE CHAMPION!--