



Worksheet 35: Classify Objects by Key Features

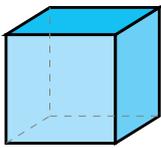
Name: _____ Date: _____

Score: _____

Section 1: Fluency (Questions 1–10)

Question 1:

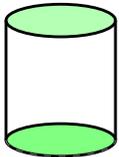
What is the name of this 3D object?



Answer: _____

Question 2:

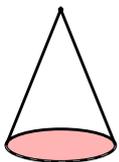
What is the name of this 3D object?



Answer: _____

Question 3:

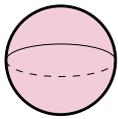
What is the name of this 3D object?



Answer: _____

Question 4:

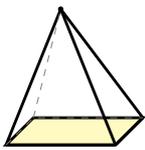
What is the name of this 3D object?



Answer: _____

Question 5:

What is the name of this 3D object?



Answer: _____

Question 6:

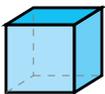
What is the name of this 3D object?



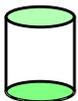
Answer: _____

Question 7:

Match the object to its name. Draw a line.



Cylinder



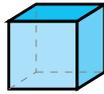
Cube

Question 8:

Circle the shape that is a **cone**.



A



B



C

Answer: _____

Question 9:

Which of these objects is a **sphere**?



A



B



C

Answer: _____

Question 10:

Write the name of this 3D object and one thing you notice about it.



Name: _____

I notice: _____

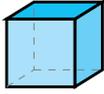
 **Good Job!**
Why did the cube go to school? To get a little more well-rounded!



Section 2: Reasoning (Questions 11–20)

Question 11:

Circle the objects that have a **curved surface**.



Cube



Sphere



Cone



Pyramid

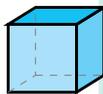
Question 12:

Does a rectangular prism have any curved surfaces?

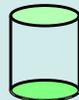
Answer: _____

Question 13:

Circle the objects that have **only flat surfaces** (no curves).



Cube



Cylinder



Pyramid

Question 14:

A cylinder has curved surfaces. **True** or **False**?

Answer: _____

Question 15:

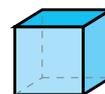
Which object has **no flat surfaces** at all?



Cone



Sphere



Cube



Answer: _____

Question 16:

Sort these objects into two groups: **Curved Surfaces** and **Only Flat Surfaces**.

Objects: Cube, Sphere, Rectangular Prism, Cone

Curved Surfaces: _____

Only Flat Surfaces: _____

Question 17:

Can a cone roll? Explain why or why not.

Answer: _____

Question 18:

Which object can roll in **any direction**?

A) Cylinder B) Sphere C) Cube

Answer: _____

Question 19:

How many flat faces does a cylinder have?

Answer: _____

Question 20:

Jake says: "A pyramid only has flat surfaces." Is he correct?

Answer: _____

Explain: _____



Good Job!

What do you call a shape that's always worried? A nervous wreck-tangle!





Section 3: Challenge (Questions 21–30)

Question 21:

I have one curved surface and one flat face. I look like a party hat. What am I?

Answer: _____

Question 22:

I have 6 flat faces. All my faces are squares. What am I?

Answer: _____

Question 23:

I can roll, but I have two flat circular faces. What am I?

Answer: _____

Question 24:

I have no edges and no vertices. I can roll in any direction. What am I?

Answer: _____

Question 25:

I have 5 faces. Four of my faces are triangles and one is a square. What am I?

Answer: _____

Question 26:

Emma is building a tower. She wants to use objects that **cannot roll**. Which objects should she choose?

Circle: Cube, Sphere, Rectangular Prism, Cylinder, Cone

Answer: _____

Question 27:



Which 3D object looks like a tin of beans?

Answer: _____

Question 28:

Draw a **real-world object** that is shaped like a sphere.



Object name: _____

Question 29:

A dice is shaped like a cube. How many corners (vertices) does a dice have?

Answer: _____

Question 30:

Create your own shape riddle. Describe a 3D object without saying its name, then write the answer.

Riddle: _____

Answer: _____



Good Job!

Why was the sphere so popular? Because it had no rough edges!



Answer Key

Worksheet 35: Classify Objects by Key Features

Question 1:

Cube

Question 2:

Cylinder

Question 3:

Cone

Question 4:

Sphere

Question 5:

Square-based Pyramid (or Pyramid)

Question 6:

Rectangular Prism

Question 7:

Cube matches Cube; Cylinder matches Cylinder

Question 8:

A

Question 9:

B

Question 10:

Name: Rectangular Prism

Notice: Answers vary (e.g., "It has rectangular faces" or "It's longer than it is tall")

Question 11:

Sphere, Cone

Question 12:

No

Question 13:

Cube, Pyramid

Question 14:

True

Question 15:

Sphere

Question 16:

Curved Surfaces: Sphere, Cone

Only Flat Surfaces: Cube, Rectangular Prism

Question 17:

Yes, because it has a curved surface (accept reasonable explanations)

Question 18:

B) Sphere

Question 19:

2 flat faces

Question 20:

Yes, he is correct. A pyramid has only flat surfaces.

Question 21:

Cone

Question 22:

Cube

Question 23:

Cylinder

Question 24:

Sphere

Question 25:

Square-based Pyramid

Question 26:

Cube, Rectangular Prism

Question 27:

Cylinder

Question 28:

Check drawing; examples: ball, orange, globe, marble

Question 29:

8 vertices

Question 30:

Check student's creative riddle and answer for accuracy



Worksheet 36: Faces, Edges, and Vertices

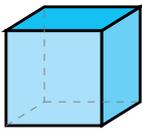
Name: _____ Date: _____

Score: _____

Section 1: Fluency (Questions 1–10)

Question 1:

How many **faces** does a cube have?



Answer: _____

Question 2:

How many **edges** does a cube have?

Answer: _____

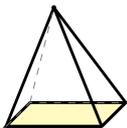
Question 3:

How many **vertices** (corners) does a cube have?

Answer: _____

Question 4:

How many faces does a square-based pyramid have?



Answer: _____

**Question 5:**

How many vertices (corners) does a square-based pyramid have?

Answer: _____

Question 6:

How many edges does a square-based pyramid have?

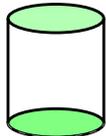
Answer: _____

Question 7:

A rectangular prism has _____ faces, _____ edges, and _____ vertices.

**Question 8:**

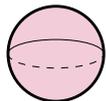
How many flat faces does a cylinder have?



Answer: _____

Question 9:

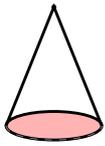
How many edges does a sphere have?



Answer: _____

Question 10:

How many vertices does a cone have?



Answer: _____



Good Job!

Why did the edge go to therapy? It was feeling a bit on the edge!





Section 2: Reasoning (Questions 11–20)

Question 11:

Which object has **more edges**: A cube or a rectangular prism?

Answer: _____

Question 12:

True or False: A sphere has 0 edges and 0 vertices.

Answer: _____

Question 13:

Which shape has more faces: A cube or a square-based pyramid?

Answer: _____

Question 14:

A cylinder has 2 edges. **True or False?**

Answer: _____

Question 15:

Compare a cube and a rectangular prism. What is the same about them?

Answer: _____

Question 16:

Which 3D object has the **most vertices**: Cube, Pyramid, or Cone?

Answer: _____

Question 17:

Sarah says: "A cone has 1 vertex." Is she correct?



Answer: _____

Explain: _____

Question 18:

How many **rectangular faces** does a cube have?

Answer: _____

Question 19:

An object has 6 faces, 12 edges, and 8 vertices. What could it be?

Answer: _____

Question 20:

Fill in the table:

Object	Faces	Edges	Vertices
Cube	_____	_____	_____
Pyramid	_____	_____	_____



Good Job!

What did the vertex say to the edge? "Let's meet at the corner!"



Section 3: Challenge (Questions 21–30)

Question 21:

I have 5 faces. Four are triangles and one is a square. Who am I?

Answer: _____

Question 22:

How many rectangular faces does a rectangular prism have?

Answer: _____

Question 23:

I have 8 edges and 5 vertices. What am I?

Answer: _____

Question 24:

A cube has 12 edges. If you paint all the edges red, how many edges will be red?

Answer: _____

Question 25:

Tom builds a tower using 3 cubes stacked on top of each other. How many faces does each cube have? How many cubes are there?

Faces per cube: _____

Number of cubes: _____

Question 26:

An object has no flat faces, no edges, and no vertices. What is it?

Answer: _____

Question 27:

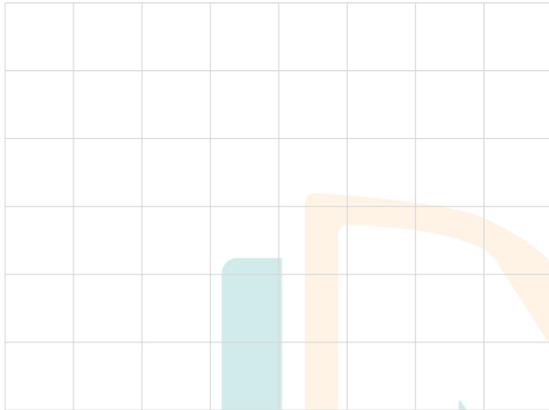


Which object has more edges: A rectangular prism or a square-based pyramid?

Answer: _____

Question 28:

Design your own 3D object. Draw it and label how many faces, edges, and vertices it has.



Faces: _____ Edges: _____ Vertices: _____

Question 29:

A triangular prism has 5 faces, 9 edges, and 6 vertices. How many of its faces are triangles?

Answer: _____

Question 30:

Challenge Riddle: I have more edges than a pyramid but fewer faces than a cube. I have 12 edges. What am I?

Answer: _____



Good Job!

Why don't 3D shapes ever get lost? Because they always know their dimensions!



Answer Key

Worksheet 36: Faces, Edges, and Vertices

Question 1:

6 faces

Question 2:

12 edges

Question 3:

8 vertices

Question 4:

5 faces

Question 5:

5 vertices

Question 6:

8 edges

Question 7:

6 faces, 12 edges, 8 vertices

Question 8:

2 flat faces

Question 9:

0 edges

Question 10:

1 vertex

Question 11:

They have the same number of edges (12 each)

Question 12:

True

Question 13:

Cube (6 faces vs 5 faces)

Question 14:

True

Question 15:

Both have 6 faces, 12 edges, and 8 vertices (accept: both have rectangular faces)

Question 16:

Cube (8 vertices)

Question 17:

Yes, she is correct. A cone has 1 vertex at the top point.

Question 18:

0 rectangular faces (all faces are squares)

Question 19:

Cube or Rectangular Prism

Question 20:

Cube: 6 faces, 12 edges, 8 vertices

Pyramid: 5 faces, 8 edges, 5 vertices

Question 21:

Square-based Pyramid

Question 22:

6 rectangular faces (or all 6 if considering squares as rectangles)

Question 23:

Square-based Pyramid

Question 24:

12 edges

Question 25:

Faces per cube: 6

Number of cubes: 3

Question 26:

Sphere

Question 27:

Rectangular Prism (12 edges vs 8 edges)

Question 28:

Check student's creative design for reasonable face/edge/vertex counts

Question 29:

2 triangular faces

Question 30:

Rectangular Prism (or Cube)