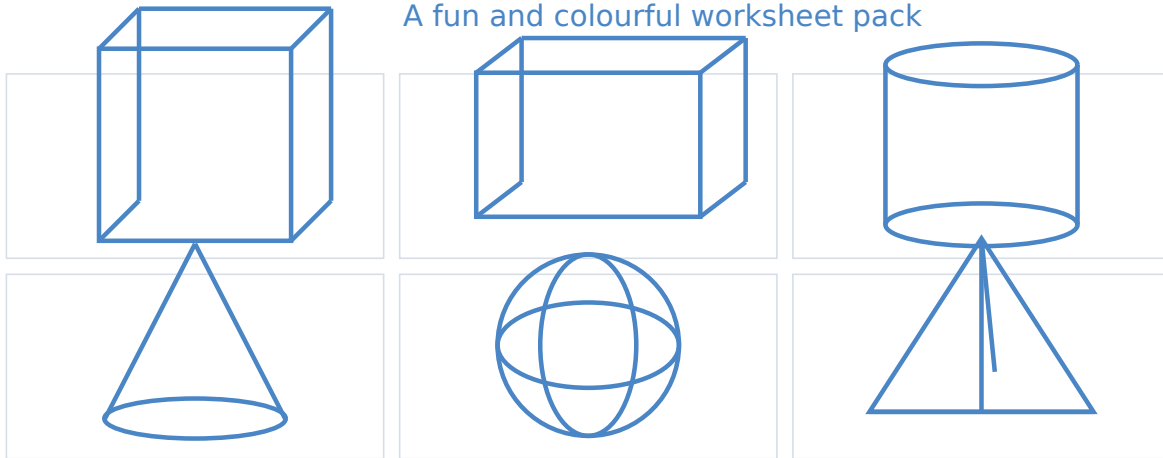


3D Shapes

A fun and colourful worksheet pack



Skills in this pack

- Identify and name common 3D shapes
- Describe faces, edges and vertices
- Sort 3D shapes by their properties
- Match 3D shapes to real-life objects
- Explore curved and flat surfaces
- Compare and reason about 3D shapes

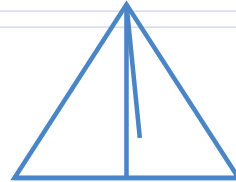
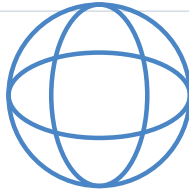
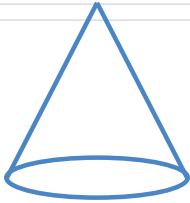
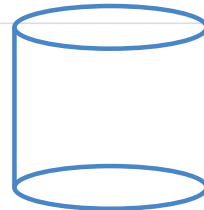
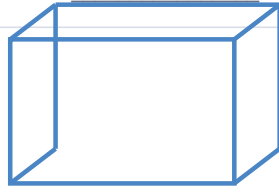
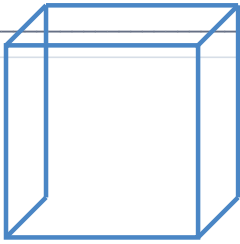
Name: _____ Date: _____

1. 3D Shape Detectives

Look at each solid and write its name.

Name: _____

Date: _____



1. Which shape can roll easily? _____
2. Which shape has a point (vertex) at the top? _____
3. Which shape has 6 square faces? _____

2. Faces, Edges & Vertices

A face is a flat surface. An edge is where two faces meet. A vertex is a corner.

Name: _____ Date: _____

3D Shape	Faces	Edges	Vertices
Cube	_____	_____	_____
Cuboid	_____	_____	_____
Cylinder	_____	_____	_____
Cone	_____	_____	_____
Sphere	_____	_____	_____
Square-based pyramid	_____	_____	_____

Think: Which shape has no vertices? _____

3. 3D Shape Properties

Read each clue and name the solid.

Name: _____ Date: _____

I have 6 square faces, 12 edges and 8 vertices. Who am I? _____

I have 2 circular faces and 1 curved surface. Who am I? _____

I have 1 circular face and 1 curved surface, with one vertex. Who am I? _____

I have one curved surface and no edges or vertices. Who am I? _____

I have rectangular faces, 12 edges and 8 vertices. Who am I? _____

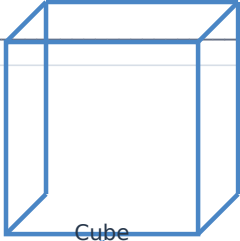
I have triangular faces that meet at one point. Who am I? _____

4. Sort the 3D Shapes

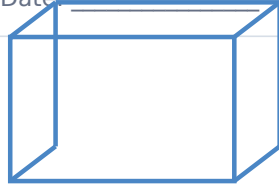
Use the shape names to complete the groups.

Name: _____

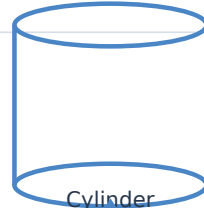
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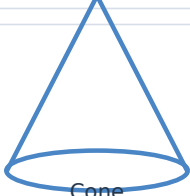
Cube



Cuboid



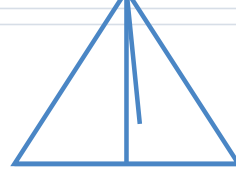
Cylinder



Cone



Sphere



Pyramid

A. Shapes with only flat faces: _____

B. Shapes with a curved surface: _____

C. Shapes that can roll: _____

D. Shapes with a vertex/vertices: _____

5. 3D Shapes Around Us

Match the everyday object to the 3D shape it most closely resembles.

Name: _____ Date: _____

Everyday object	3D shape
Dice	_____
Tin can	_____
Ice-cream cone	_____
Football	_____
Cereal box	_____
Party hat	_____
Building block	_____
Globe	_____

Challenge: Name one more real-life object shaped like a cylinder: _____

6. Roll, Slide or Stack?

Think about the surfaces of each 3D shape.

Name: _____ Date: _____

Shape	Can roll?	Can slide?	Can stack easily?
Cube	_____	_____	_____
Cuboid	_____	_____	_____
Cylinder	_____	_____	_____
Cone	_____	_____	_____
Sphere	_____	_____	_____

Think: Why can a sphere roll in many directions? _____

7. Compare the Shapes

Use your 3D shape knowledge to answer.

Name: _____ Date: _____

1. Which has more faces: a cube or a cylinder? _____
2. Which has more vertices: a cube or a cone? _____
3. Which has fewer edges: a sphere or a cuboid? _____
4. Name a shape with both flat and curved surfaces. _____
5. Name a shape with no flat faces. _____
6. Name a shape with 8 vertices. _____

Draw: Draw a cube and a sphere in the space below.

8. 3D Shapes in Real Life

Use what you know about solids to solve each problem.

Name: _____ Date: _____

1. A toy box is shaped like a cuboid. How many vertices does it have?

Answer: _____

2. A dice is shaped like a cube. How many faces does it have?

Answer: _____

3. A can is shaped like a cylinder. Does it have flat faces, curved surfaces, or both?

Answer: _____

4. A ball is shaped like a sphere. How many vertices does it have?

Answer: _____

5. An ice-cream cone has one circular base. What 3D shape is it?

Answer: _____

6. A building block has 6 square faces. What 3D shape could it be?

Answer: _____

9. Super 3D Shape Challenge!

Use everything you have learned about 3D shapes.

Name: _____ Date: _____

1. Name a 3D shape with 6 faces: _____

2. Name a 3D shape with no vertices: _____

3. Name a 3D shape with one vertex: _____

4. Which has more edges: a cube or a cylinder? _____

5. How many faces do 2 cubes have altogether? _____

6. Draw a 3D shape that can roll.

7. Draw a 3D shape that can stack easily.

8. Find two different 3D shapes that both have curved surfaces: _____ and

MY CONFIDENCE CHECK

I can name common 3D shapes. ☐ Yes ☐ Almost ☐ I need more practice

I can describe faces, edges and vertices. ☐ Yes ☐ Almost ☐ I need more practice

I can connect 3D shapes to real-life objects. ☐ Yes ☐ Almost ☐ I need more practice

Teacher Answer Key

Suggested answers for quick checking.

1. Shape Detectives

Cube, cuboid, cylinder, cone, sphere, pyramid. 1) Sphere/cylinder/cone can roll, depending on surface. 2) Cone. 3) Cube.

2. Faces, Edges & Vertices

Cube: 6,12,8. Cuboid: 6,12,8. Cylinder: 2 flat faces, 0 straight edges in elementary descriptions, 0 vertices. Cone: 1 flat face, 1 curved surface, 1 vertex. Sphere: 0 flat faces, 0 edges, 0 vertices. Square-based pyramid: 5 faces, 8 edges, 5 vertices.

3. Properties

Cube; cylinder; cone; sphere; cuboid; pyramid.

4. Sort the 3D Shapes

A: cube, cuboid, pyramid. B: cylinder, cone, sphere. C: cylinder, cone, sphere. D: cube, cuboid, cone, pyramid.

5. Around Us

Dice → cube; tin can → cylinder; ice-cream cone → cone; football → sphere; cereal box → cuboid; party hat → cone; building block → cube; globe → sphere. Extra answers vary.

6. Roll, Slide or Stack

Cube: No/Yes/Yes. Cuboid: No/Yes/Yes. Cylinder: Yes/Yes/Usually yes when flat. Cone: Yes/Yes/No. Sphere: Yes/No/No. Answers can be discussed based on orientation.

7. Compare

1) Cube. 2) Cube. 3) Sphere. 4) Cylinder or cone. 5) Sphere. 6) Cube or cuboid.

8. Real Life

1) 8 vertices. 2) 6 faces. 3) Both flat and curved surfaces. 4) 0 vertices. 5) Cone. 6) Cube.

9. Super Challenge

1) Cube/cuboid/pyramid depending on face count interpretation; cube and cuboid both have 6 faces. 2) Sphere. 3) Cone. 4) Cube. 5) 12 faces altogether. 6-7) Drawings vary. 8) Cylinder and cone.

