



TestGenie Question Paper

Class: 2

Subject: Maths

Name: _____

Mathematics Question Paper for Class 2

Subject: Shapes Around Us (3D Shapes)

Total Questions: 36

Total Marks: 36

Section A: Word Problems (6 Questions)

1. A toy box is in the shape of a cube. If the length of one side is 4 cm, what is the total length of all the edges of the box?
2. Mia has a ball that is spherical in shape. If she buys another ball which is also a sphere, how many spherical balls does she have now?
3. A birthday cake is shaped like a cylinder. If it has a height of 10 cm and a radius of 3 cm, how tall is the cake when it is standing on a table?
4. Sam built a pyramid using blocks. If he used 5 blocks at the base and 1 block at the top, how many blocks did he use in total?
5. There are 3 cones stacked on top of each other. If each cone has a height of 6 cm, what is the total height of the stacked cones?
6. A box shaped like a cuboid has a length of 10 cm, a width of 5 cm, and a height of 2 cm. What is the volume of the box?

Section B: Multiple Choice Questions (MCQs) (6 Questions)

1. Which shape has 6 faces?
 - A) Sphere
 - B) Cube
 - C) Cone

- D) Cylinder

Answer: B

2. Which of the following shapes has no edges?

- A) Cube
- B) Sphere
- C) Pyramid
- D) Cuboid

Answer: B

3. How many corners does a cube have?

- A) 4
- B) 6
- C) 8
- D) 12

Answer: C

4. What shape is a can of soda?

- A) Sphere
- B) Cylinder
- C) Cube
- D) Cone

Answer: B

5. Which shape has a circular base and tapers to a point?

- A) Cube
- B) Cylinder
- C) Cone
- D) Sphere

Answer: C

6. If a box is in the shape of a cuboid and has a length of 4 cm, a width of 4 cm, and a height of 5 cm, how many corners does it have?

- A) 6
- B) 4

- C) 8
- D) 10

Answer: C

Section C: Fill in the Blanks (6 Questions)

1. A _____ has 2 circular faces and 1 curved surface.
2. The total number of faces on a cube is _____.
3. A pyramid has a _____ base and triangular faces that meet at a point.
4. The shape that rolls easily is a _____.
5. An object that has 12 edges is called a _____.
6. A sphere has _____ corners.

Section D: True or False (6 Questions)

1. True or False: A cone has one flat face and one curved face.
2. True or False: A cylinder has 3 edges.
3. True or False: A cube is a type of rectangular prism.
4. True or False: A tetrahedron has four triangular faces.
5. True or False: A sphere is also known as a circle in three dimensions.
6. True or False: All cuboids are also cubes.

Section E: Match the Following (6 Questions)

Column A	Column B
-----	-----
1. Cube	A. 4 faces

- | | | |
|-------------|---------------------|--|
| 2. Cylinder | B. No corners | |
| 3. Cone | C. 6 edges | |
| 4. Sphere | D. 2 circular faces | |
| 5. Pyramid | E. Pointy top | |
| 6. Cuboid | F. 12 edges | |

Section F: Story-Based Problems (6 Questions)

1. Emma made a box for her toys. If the box is a cube and each side measures 5 cm, how much space is inside the box for her toys?
2. Noah has 3 toy cars shaped like cylinders and 2 shaped like cones. How many toy cars does he have in total?
3. During art class, Lisa made a paper model of a pyramid. If she used 8 triangles, how many triangular faces does her pyramid have?
4. While playing with a ball, Alex counted 8 balls in total. If each ball is in the shape of a sphere, how many balls does he have now if he gives away 2?
5. Sarah has a container shaped like a cuboid, and she wants to fill it with water. If the length is 10 cm, the width is 4 cm, and the height is 2 cm, what is the maximum volume of water it can hold?
6. Timmy is playing with his building blocks. He has created 4 cube towers. If each tower has 3 cubes stacked on top, how many cubes does he have in total?

End of Question Paper

Instructions: Read every question carefully and answer to the best of your ability. Good luck!



TestGenie Answer Key

Class: 2

Subject: Maths

Answer Key for Mathematics Question Paper: Shapes Around Us (3D Shapes)

Section A: Word Problems (6 Questions)

1. Question: A toy box is in the shape of a cube. If the length of one side is 4 cm, what is the total length of all the edges of the box?

Answer:

The formula for the total length of all edges of a cube is:

\backslash

$$\text{Total Length of Edges} = 12 \times \text{Length of one side}$$

\backslash

Here, the length of one side is 4 cm.

\backslash

$$\text{Total Length of Edges} = 12 \times 4 = 48 \text{ cm}$$

\backslash

2. Question: Mia has a ball that is spherical in shape. If she buys another ball which is also a sphere, how many spherical balls does she have now?

Answer:

Mia had 1 spherical ball and bought 1 more.

\backslash

$$\text{Total spherical balls} = 1 + 1 = 2 \text{ spherical balls}$$

\backslash

3. Question: A birthday cake is shaped like a cylinder. If it has a height of 10 cm and a radius of 3 cm, how tall is the cake when it is standing on a table?

Answer:

The height of the cake stands at 10 cm as given. Therefore, when the cake is standing on a table, its height is still 10 cm.

4. Question: Sam built a pyramid using blocks. If he used 5 blocks at the base and 1 block at the top, how many blocks did he use in total?

Answer:

Total blocks used = blocks at the base + blocks at the top

\[

$$\text{Total blocks used} = 5 + 1 = 6 \text{ blocks}$$

\]

5. Question: There are 3 cones stacked on top of each other. If each cone has a height of 6 cm, what is the total height of the stacked cones?

Answer:

The total height can be calculated by multiplying the height of one cone by the number of cones.

\[

$$\text{Total height} = 3 \times 6 = 18 \text{ cm}$$

\]

6. Question: A box shaped like a cuboid has a length of 10 cm, a width of 5 cm, and a height of 2 cm. What is the volume of the box?

Answer:

The volume of a cuboid is calculated using the formula:

\[

$$\text{Volume} = \text{length} \times \text{width} \times \text{height}$$

\]

\[

$$\text{Volume} = 10 \times 5 \times 2 = 100 \text{ cm}^3$$

\]

Section B: Multiple Choice Questions (MCQs) (6 Questions)

1. Answer: B) Cube

2. Answer: B) Sphere

3. Answer: C) 8

4. Answer: B) Cylinder

The answer key is generated by testgenie.ai and should be reviewed for precision.

5. Answer: C) Cone

6. Answer: C) 8

Section C: Fill in the Blanks (6 Questions)

- 1. A cylinder has 2 circular faces and 1 curved surface.
- 2. The total number of faces on a cube is 6.
- 3. A pyramid has a square base and triangular faces that meet at a point.
- 4. The shape that rolls easily is a sphere.
- 5. An object that has 12 edges is called a cuboid.
- 6. A sphere has 0 corners.

Section D: True or False (6 Questions)

- 1. True: A cone has one flat face and one curved face.
- 2. False: A cylinder has 3 edges. (It has 2 edges.)
- 3. True: A cube is a type of rectangular prism.
- 4. True: A tetrahedron has four triangular faces.
- 5. True: A sphere is also known as a circle in three dimensions.
- 6. False: All cuboids are also cubes. (Cuboid can have different lengths, widths, and heights, while a cube has equal dimensions.)

Section E: Match the Following (6 Questions)

Column A	Column B	
-----	-----	

The answer key is generated by testgenie.ai and should be reviewed for precision.

- | | | |
|-------------|---------------------|--|
| 1. Cube | C. 6 edges | |
| 2. Cylinder | D. 2 circular faces | |
| 3. Cone | E. Pointy top | |
| 4. Sphere | B. No corners | |
| 5. Pyramid | A. 4 faces | |
| 6. Cuboid | F. 12 edges | |

Matches:

1 - C

2 - D

3 - E

4 - B

5 - A

6 - F

Section F: Story-Based Problems (6 Questions)

1. Question: Emma made a box for her toys. If the box is a cube and each side measures 5 cm, how much space is inside the box for her toys?

Answer:

Volume of the cube = side³

\[

$\text{Volume} = 5 \times 5 \times 5 = 125 \text{ cm}^3$

\]

Emma has 125 cm³ of space inside the box.

2. Question: Noah has 3 toy cars shaped like cylinders and 2 shaped like cones. How many toy cars does he have in total?

Answer:

Total toy cars = cylindrical cars + conical cars

\[

$\text{Total toy cars} = 3 + 2 = 5 \text{ toy cars}$

\]

The answer key is generated by testgenie.ai and should be reviewed for precision.

3. Question: During art class, Lisa made a paper model of a pyramid. If she used 8 triangles, how many triangular faces does her pyramid have?

Answer: Lisa's pyramid has 8 triangular faces.

4. Question: While playing with a ball, Alex counted 8 balls in total. If each ball is in the shape of a sphere, how many balls does he have now if he gives away 2?

Answer:

\[

$$\text{Remaining balls} = 8 - 2 = 6 \text{ balls}$$

\]

5. Question: Sarah has a container shaped like a cuboid, and she wants to fill it with water. If the length is 10 cm, the width is 4 cm, and the height is 2 cm, what is the maximum volume of water it can hold?

Answer:

The volume of water able to be held is:

\[

$$\text{Volume} = 10 \times 4 \times 2 = 80 \text{ cm}^3$$

\]

6. Question: Timmy is playing with his building blocks. He has created 4 cube towers. If each tower has 3 cubes stacked on top, how many cubes does he have in total?

Answer:

Total number of cubes = towers \times cubes per tower

\[

$$\text{Total cubes} = 4 \times 3 = 12 \text{ cubes}$$

\]

End of Answer Key

This answer key provides a clear and descriptive breakdown of the required answers for each question on the mathematics question paper concerning 3D shapes, suitable for Class 2 students.