Test answers - 2D and 3D shapes

Year: Year 1 · Duration: 20 minutes · /20

Answer to Question 1 (4 marks)

a. The first shape has 3 straight sides, so it is a **triangle**. (1 mark)
b. The second shape is round with no straight sides, so it is a **circle**. (1 mark)
c. Count the sides of the triangle: 1, 2, 3. It has **3** sides. (1 mark)
d. A circle has no corners at all, so the answer is **0**. (1 mark for 0; no mark for 1.)

Answer to Question 2 (4 marks)

a. All its faces are squares, so the first shape is a **cube**. (1 mark)
b. The second shape is round all over, like a ball: a **sphere**. (1 mark)
c. The third shape has two circle faces and a curved side, like a tin: a **cylinder**. (1 mark)
d. A cube has a top, a bottom and 4 faces round the sides: 1 + 1 + 4 = **6** faces. (1 mark)

Answer to Question 3 (4 marks)

a. A flat shape with 4 equal sides is a **square**. (1 mark; rectangle gets no mark because its sides are not all equal.)
b. A solid that rolls like a ball is a **sphere**. (1 mark)
c. Any flat shape with 3 sides is a **triangle**. (1 mark)
d. A circle at the bottom and a point at the top describes a **cone**. (1 mark)

Answer to Question 4 (4 marks)

a. Read the pattern from the left: the first shape is a **square**. (1 mark)
b. The pattern goes square, circle, square, circle, so after a circle comes a **square**. (1 mark)
c. Count only the round shapes in the picture: there are **2** circles. (1 mark)
d. The finished pattern has 3 squares with 4 corners each: 4 + 4 + 4 = **12** corners. (1 mark for 12; working may be shown as 3 × 4.)

Answer to Question 5 (4 marks)

a. Count every block: 1 cuboid + 1 pyramid + 2 cylinders = **4** solid shapes. (1 mark)
b. The pyramid has a square base and 4 triangle faces: 1 + 4 = **5** faces. (1 mark)

c. A cuboid is like a box: top, bottom, front, back and two ends, so it has **6** flat faces. (1 mark)
d. Add the faces of the two shapes: 6 + 5 = **11** faces in all. (1 mark)