WONDERLEARNERZ PRIMARY ACADEMY â€¢ PRACTICE & ASSESSMENT WORKSHEET

Shapes and Geometry - Worksheet 1

Grade 3 | Mathematics | Ch 1: Shapes and Geometry | Total Marks: 19 | Time: 30 Minutes

Student Name: _____ **Roll / ID No:** _____

Grade / Section: _____ **Date:** _____ **Score:** _____ / 19

Instructions: Section A (Q1-Q4): Choose the correct option (A, B, C, or D). Section B (Q5-Q9): Write your exact one-word or numerical answer. Section C & D (Q10-Q15): Write your detailed answers, corrections, and show all working steps neatly in the space provided.

Q1. How many straight edges does a standard cuboid box have? [1 Mark]

( ) A. 12 straight edges
( ) B. 8 straight edges
( ) C. 6 straight edges
( ) D. 16 straight edges

Q2. Which 2D shape has exactly 3 straight sides and 3 sharp corners (vertices)? [1 Mark]

( ) A. Triangle
( ) B. Rectangle
( ) C. Pentagon
( ) D. Circle

Q3. How many flat faces and curved surfaces does an upright solid cylinder possess? [1 Mark]

( ) A. 2 flat circular faces and 1 curved surface
( ) B. 1 flat face and 2 curved surfaces
( ) C. 3 flat faces and 0 curved surfaces
( ) D. 0 flat faces and 1 curved surface

Q4. What 2D shape does a soup can (cylinder) appear to be when viewed directly from the side at eye level? [1 Mark]

( ) A. Rectangle
( ) B. Circle
( ) C. Triangle
( ) D. Oval

Q5. At the Architecture Model Studio, an artisan glues 3 wooden cubes together in a straight row. How many total flat square faces were on the cubes before gluing? [1 Mark]

Q6. A stage designer paints all exterior sides of 4 rectangular display boxes (cuboids). If each box has 6 flat faces, how many faces are painted across all 4 boxes? [1 Mark]

Q7. In a toy set, children assemble 2 cylindrical towers and 3 cubic blocks. How many circular flat faces are there in total on the towers? [1 Mark]

Q8. Identify the mystery solid: 'I have 0 flat faces, 0 straight edges, and 1 continuous curved surface. I can roll smoothly in any direction.' **[1 Mark]**

Q9. Complete the geometry equation: [?] Cubes + 1 Cylinder = 38 edges in total. How many cubes are there? **[1 Mark]**

Q10. A student claims: 'A rectangle is always a square because both have 4 right angles.' What is the conceptual error in this statement? **[1 Mark]**

Q11. Liam looks at an upright traffic cone from directly above and says: 'The top view is a triangle.' Why is Liam incorrect? **[1 Mark]**

Q12. Why can cubes and cuboids be stacked tightly into high storage walls without gaps, while spheres leave empty space? **[2 Marks]**

Q13. If you slice a standard solid cuboid with a single straight flat cut parallel to its base, what 2D cross-section shape is revealed? **[2 Marks]**

Q14. An architect builds a tower by gluing 3 cubes in a vertical stack. If each cube has 6 faces, and adjacent cubes share 1 glued face each, how many exposed outer faces does the tower have? **[2 Marks]**

Q15. A packaging designer lines all 12 edges of a cube with reflective tape. If each edge is 15 cm long, what is the total length of reflective tape required? **[2 Marks]**