Geometry of 3-D Objects: Faces, Vertices, Edges & Nets

WORKSHEET

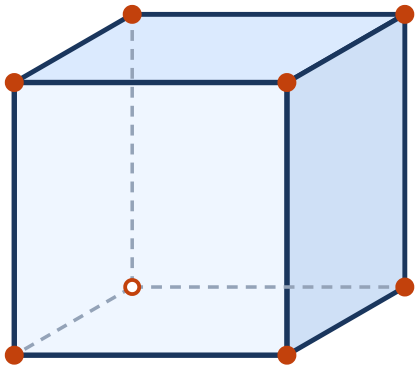
Name: ..... Class: .....

Date: .....

MARK ____ / 14

Answer all questions. Show all your working — marks are awarded for method as well as the final answer.

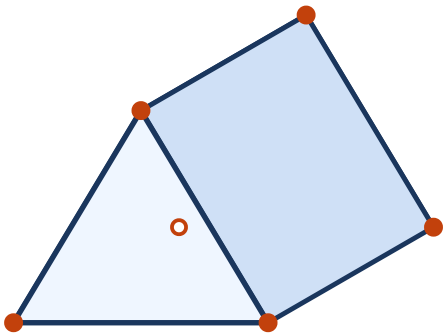
1 How many faces, vertices and edges does a cube have? (3)



hidden edges are dashed

2 State Euler's formula. (1)

3 A solid has 5 faces and 6 vertices. How many edges? (2)

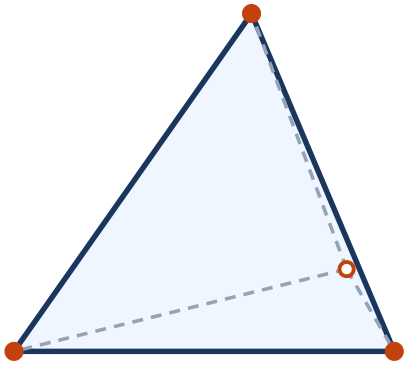


a triangular prism

4 How many Platonic solids are there? (1)

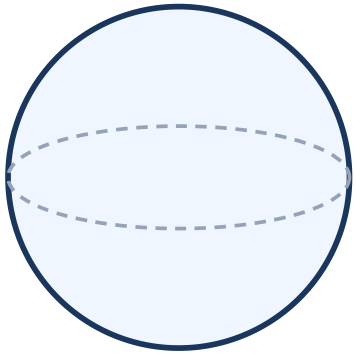
5 How many faces does an octahedron have, and what shape are they? (2)

6 Check Euler's formula for a tetrahedron (4 faces, 4 vertices, 6 edges). (2)



a tetrahedron — 4 triangular faces

7 How many edges and vertices does a sphere have? (1)



no edges, no vertices

8 How many squares are in the net of a cube? (1)

9 A net has 2 circles and 1 rectangle. Which solid is it? **(1)**

TOTAL: 14 marks

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