Homework/Extension
Step 9: Construct 3D Shapes

National Curriculum Objectives:

Mathematics Year 3: (3G3b) Make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them

Differentiation:

Questions 1, 4 and 7 (Varied Fluency)
Developing Identify the nets with the same of number of faces. Shapes include cylinders, cuboids, cones and pyramids.
Expected Identify the nets with the same of number of faces. Shapes include cubes, cuboids, cylinders, cones, triangular and square-based pyramids and triangular prisms.
Greater Depth Identify the nets with the same of number of vertices. Shapes include cylinders, cuboids, cones, pyramids and prisms and more complex pyramids and prisms.

Questions 2, 5 and 8 (Varied Fluency)
Developing Identify the nets of a variety of 3D shapes including cylinders, cuboids, cones and pyramids.
Expected Identify the nets of a variety of 3D shapes including cubes, cuboids, cylinders, cones, triangular and square-based pyramids and triangular prisms.
Greater Depth Identify the correct net of a variety of 3D shapes including cylinders, cuboids, cones, pyramids and prisms and more complex pyramids and prisms.

Questions 3, 6 and 9 (Reasoning and Problem Solving)
Developing Determine if the statement regarding the construction of a 3D shape is true or false. Shapes include cylinders, cuboids, cones and pyramids.
Expected Determine if the statements regarding the construction of a 3D shape are true or false. Shapes include cubes, cuboids, cylinders, cones, triangular and square-based pyramids and triangular prisms.
Greater Depth Determine if the statements regarding the construction of a 3D shape are true or false. Shapes include cylinders, cuboids, cones, pyramids and prisms and more complex pyramids and prisms.
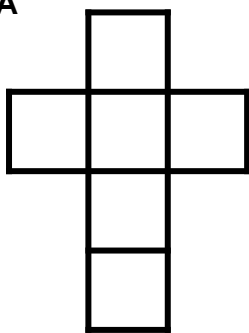
More Year 3 Properties of Shapes resources.

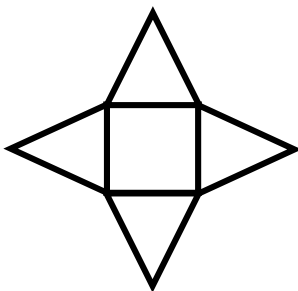## Did you like this resource? Don't forget to review it on our website.

Construct 3D Shapes

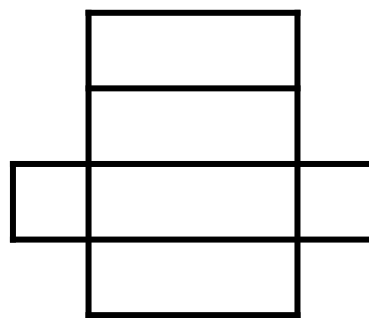**1. Tick the nets of the 3D shapes that have the same number of faces.**
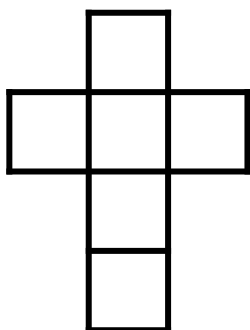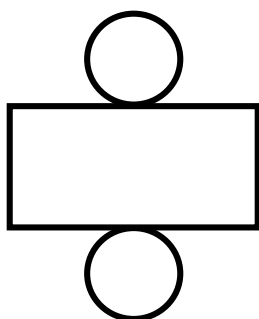
A

B

C

VF
HW/Ext

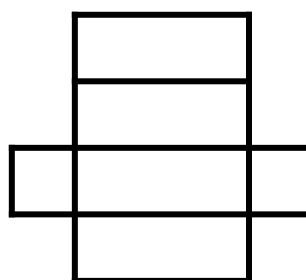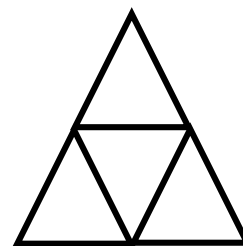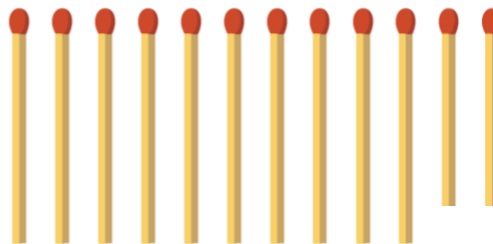**2. Circle the net of a cylinder.**

A

B

C

D

VF
HW/Ext

3. Using the given resources, determine whether the statement below is true or false.

You can construct a cube.

9 sticky tack balls
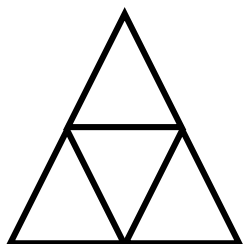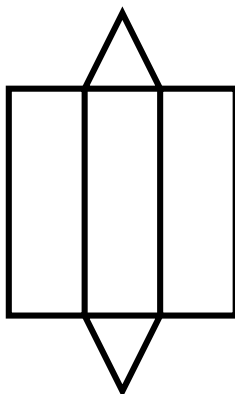
12 Matchsticks

Explain how you know.

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Homework/Extension – Construct 3D Shapes – Year 3 Developing

Construct 3D Shapes

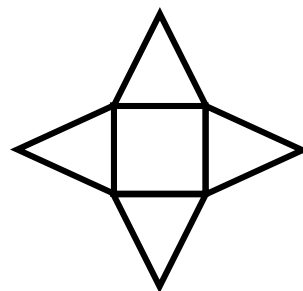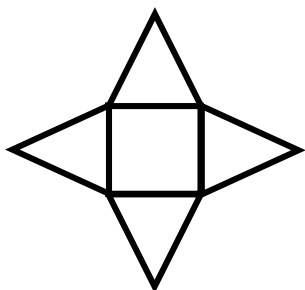**4. Tick the nets of the 3D shapes that have the same number of faces.**
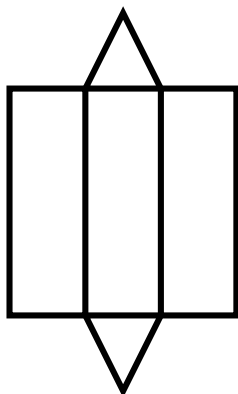
A

B

C

VF
HW/Ext

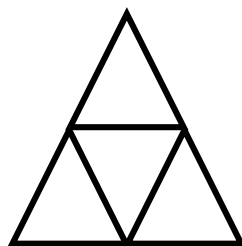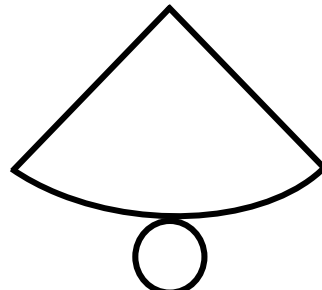**5. Circle the net of a triangular prism.**

A

B

C

D

VF
HW/Ext

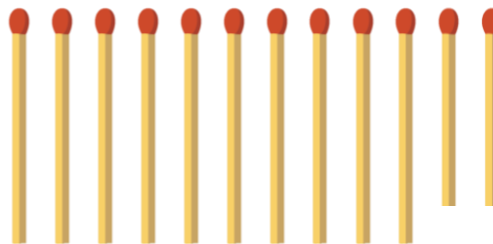**6. Using the given resources, determine whether the statements below are true or false.**

A. You can construct a cube.

B. You can construct a triangular prism.

9 sticky tack balls
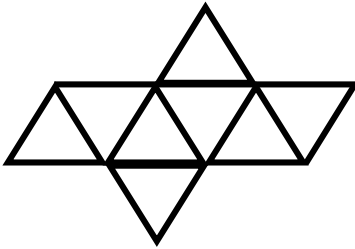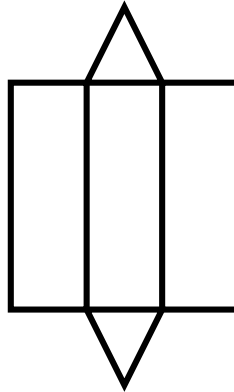
12 Matchsticks

Explain how you know.

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HW/Ext

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Homework/Extension – Construct 3D Shapes – Year 3 Expected

Construct 3D Shapes

7. Tick the nets of the 3D shapes that have the same number of vertices.

A

B
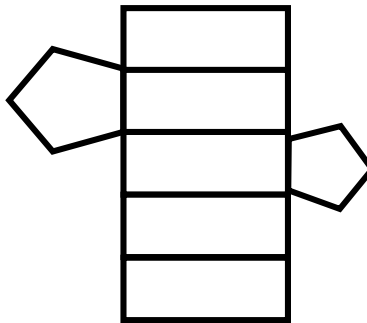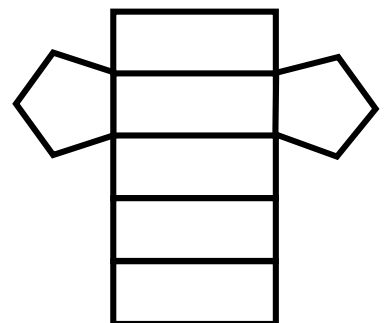
C
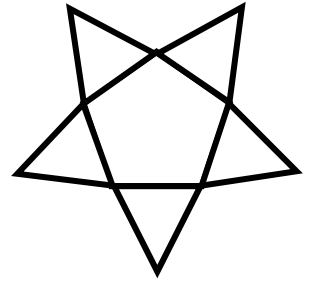
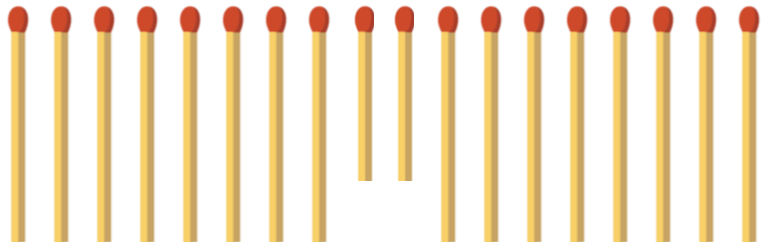**8. Circle the correct net of a pentagonal prism.**

A

B

C
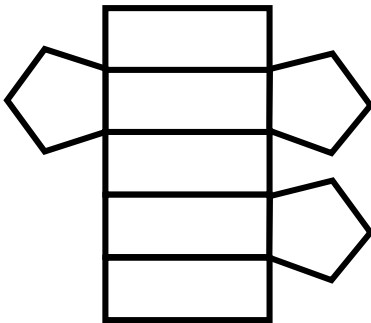
9. Using the given resources, determine whether the statements below are true or false.

> **A. You can construct a hexagonal prism.**

> **B. You can construct a octahedron.**

11 sticky tack balls

18 Matchsticks

Explain how you know.

Homework/Extension – Construct 3D Shapes – Year 3 Greater Depth

Homework/Extension
Construct 3D Shapes

Developing
1. **A and C**
2. **B**
3. **False because to make a cube you would need 12 matches of equal length and the image shows two shorter matches.**

Expected
4. **B and C**
5. **B**
6. **A is false because the matchsticks are unequal.**
B is true because you would only need 9 matchsticks and 6 sticky tack balls.

Greater Depth
7. **A, B and C**
8. **C**
9. **A is false because you would need 12 sticky tack balls to for the vertices of a hexagonal prism.**
B is true because you would only need 12 matches and 6 sticky tack balls for an octahedron.

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