

What's My Shape?

1 Write a description of a 3D object. If your partner can guess your shape without you saying its name, you win.

a Name your a 3D object. _____

b Draw it.

c Draw its net.

d List the features of your shape.

Edges	Vertices	Faces – number and shape	Apex? Bases?

2 Write a description of your 3D object.

3 Read your shape description to a partner. Can they name the 3D object?

Yes - well done! You win!

No - rewrite your description. What could you add to make it clearer? Try again.

4 Repeat with other 3D objects Are some shapes harder to describe than others? Why?

Critical thinking and problem solving

Mathseeds encourages children to solve problems and use higher level thinking throughout the program. These critical thinking and problem solving worksheets provide a growing toolkit of different strategies, using a simple structure that helps children grow in skills and confidence. The more experience children have with higher-level thinking, the more confidence they will gain to think logically, take risks, ask questions and apply reason. In turn, this will encourage them to communicate, explain and justify their mathematical reasoning.

Tackle each problem using this simple structure.

1. Read the question

Encourage children to read the question carefully.

2. Underline the question

What is the question asking them to do? In turn, children can ask their own questions such as: Is this an addition problem? Do I need to draw a shape? Am I being asked to measure something?

3. Circle the facts

Focus on the important facts needed to solve the problem: numbers, words or phrases.

4. Use a strategy to solve the problem

Think about how to solve the problem, which strategy will you use?

5. Evaluate

Encourage children to think about how they solved the problem; to check their answer and to share their solutions with a partner. Consider other ways or strategies they could have used to find a solution. This encourages children to reflect, to analyse, to ask questions and to explore alternate options.

Lesson 169 • What's My Shape?

The strategies used in this lesson are:

Draw a diagram and **Write a description**

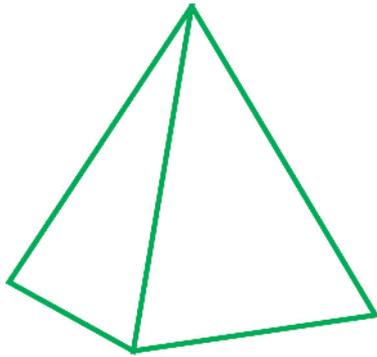
Drawing diagrams helps to clearly visualise the problem — in this case, the relevant attributes of a 3D shape. It allows children to break down the information they need to put into words. By progressing from visual representations to a description in proper sentences, children are moving towards a higher level of mathematical thinking in which they consider their own mathematical knowledge and how to pass it along to someone else.

What's My Shape? **Answers!**

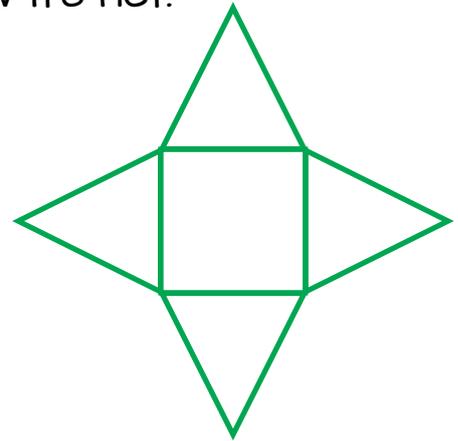
- 1 Write a description of a 3D object. If your partner can guess your shape without you saying its name, you win. **Answers will vary.*

a Name your a 3D object. square pyramid

b Draw it.



c Draw its net.



d List the features of your shape.

Edges	Vertices	Faces – number and shape	Apex? Bases?
8	5	4 triangles 1 square	1 apex square base

2 Write a description of your 3D object.

My shape has a square base, 4 triangle shaped sides and an apex. It has 5 vertices and 8 edges. What is it?

3 Read your shape description to a partner. Can they name the 3D object?

Yes - well done! You win!

No - rewrite your description. What could you add to make it clearer? Try again.

4 Repeat with other 3D objects Are some shapes harder to describe than others? Why?