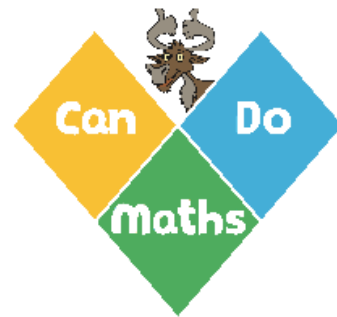


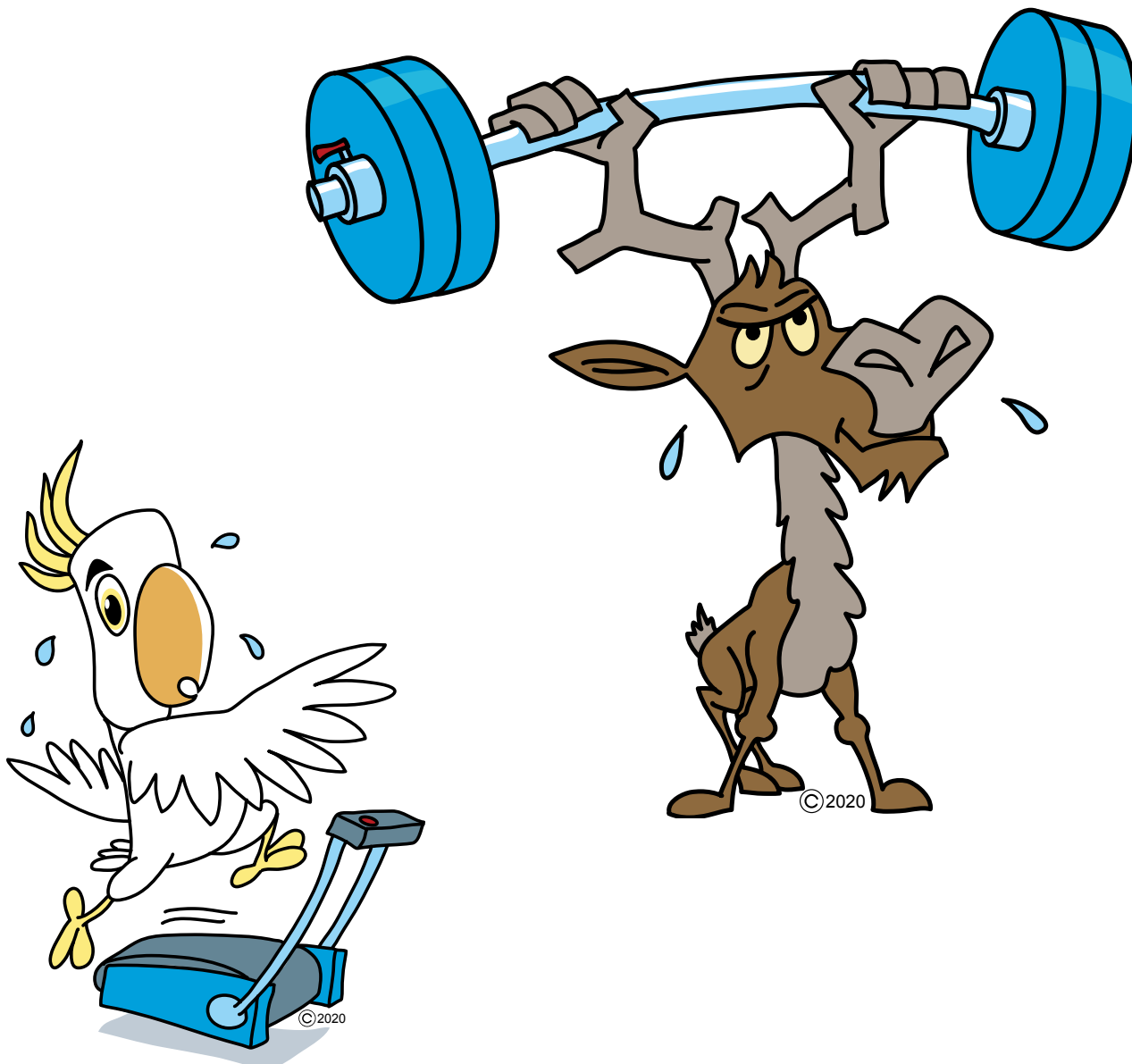


Colin and Coco's Deliberate Practice

Year 2 Unit 2

Geometry: Properties of Shapes

Answers





Contents

This pack of deliberate practice is designed to be used flexibly to secure the manageable steps of this unit.

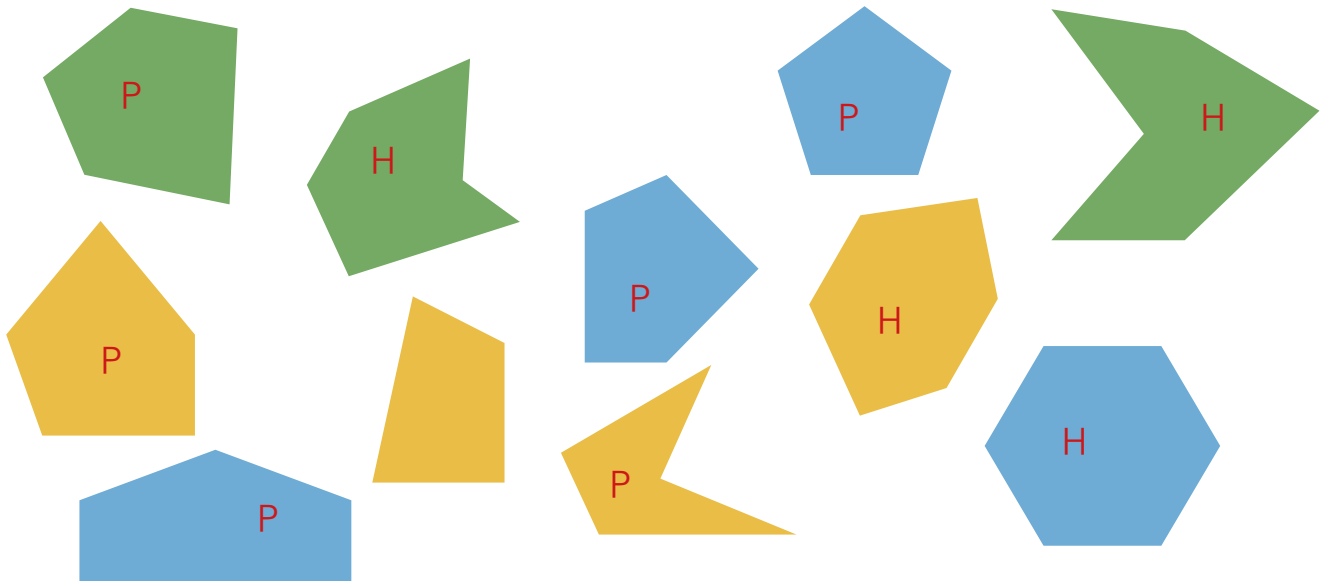
The table below indicates which activities are linked to which manageable steps.

	Do It	Challenge It	Play It
Identify and describe the properties of pentagons	1	1	1, 2
Identify and describe the properties of hexagons	1		1, 2
Identify and describe the properties of octagons		2	2
Identify symmetry properties of 2-D shapes using vertical lines	2		
Identify and describe the properties of 3-D shapes including the number of vertices	3		
Identify and describe the properties of 3-D shapes including the number of edges	3	3	
Identify and describe the properties of 3-D shapes including the number of faces	3	3	



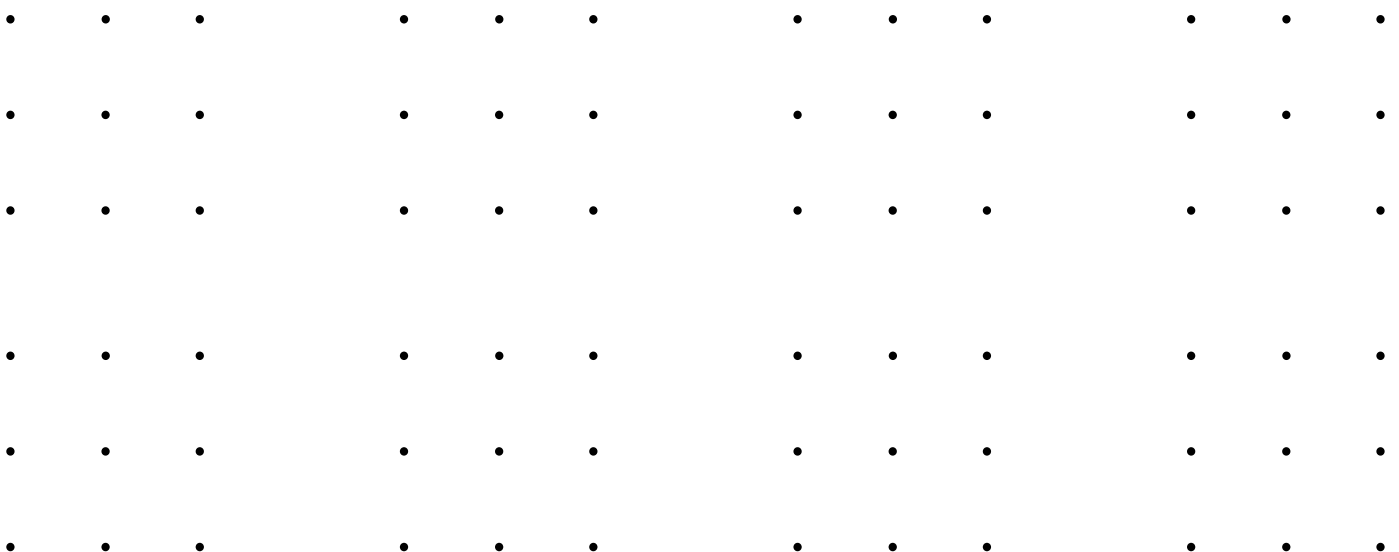
Do It 1

Label pentagons with P
Label hexagons with H



Challenge It 1

How many different pentagons can you draw by joining dots on a 3 by 3 dotted grid?





Pentagons and Hexagons Game

Play It 1

You need:

Sticks of two different lengths

1 - 6 dice

To play:

Take it in turns to throw the dice and collect that number of sticks.

Make pentagons and hexagons with your sticks.

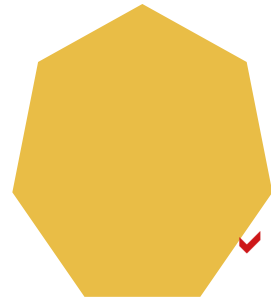
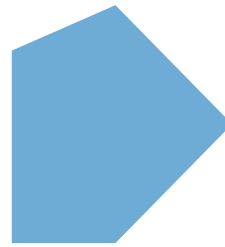
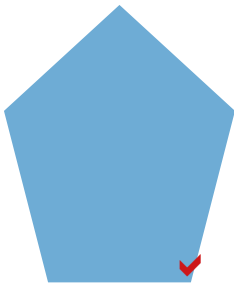
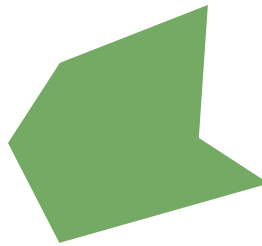
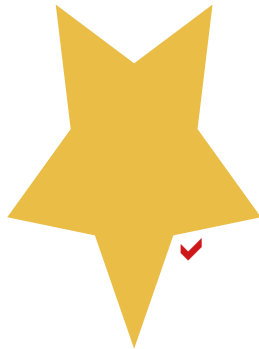
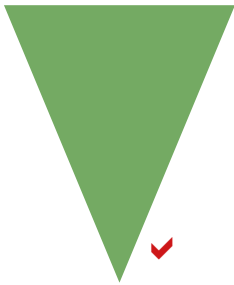
To win:

The winner is the first player to make three hexagons and two pentagons.



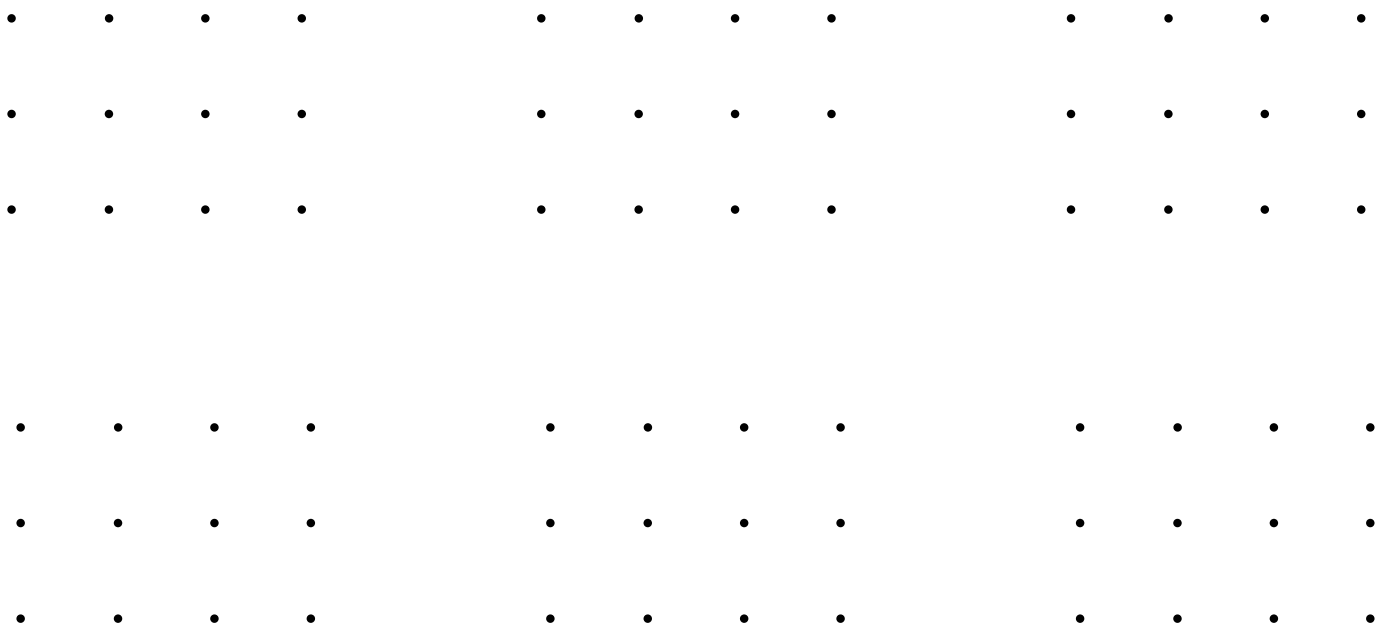
Do It 2

Tick the shapes that have a line of symmetry.



Challenge It 2

How many different octagons can you draw by joining dots on a 3 by 4 dotted grid?





Dotty Shapes Game

Play It 2

You need:

Pencil and paper each

Dotty grid

To play:

Take it in turns to draw a straight line joining any two dots.

If you create a pentagon score 1 point.

If you create a hexagon score 2 points.

If you create an octagon score 3 points.

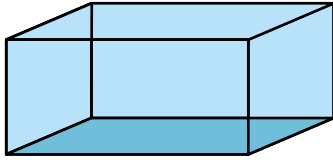
Your line must not cross a line already drawn.

To win:

The winner is the first player to score 20 points.



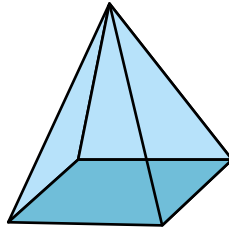
How many vertices, edges and faces do the 3D shapes have?



8 Vertices

12 Edges

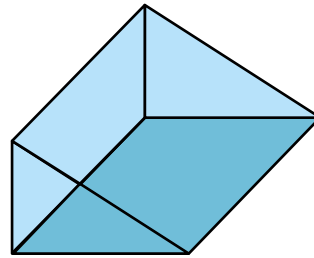
6 Faces



5 Vertices

8 Edges

5 Faces



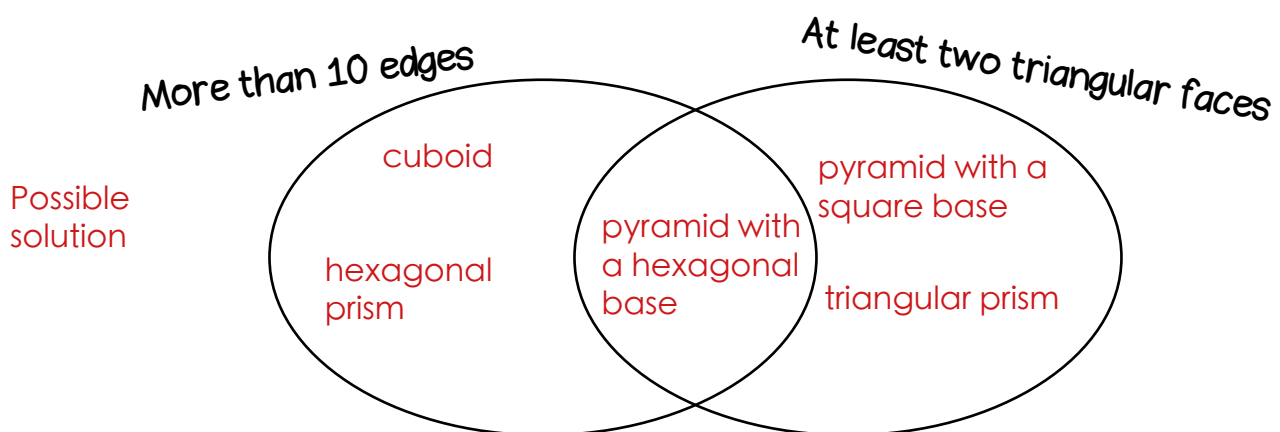
6 Vertices

9 Edges

5 Faces

Challenge It 3

Put 3D shapes in each part of the diagram, if possible.





Game

Play It 3

You need:

A bag of assorted 3D shapes

To play:

Take it in turns to put your hand into the bag and hold a shape.

Your partner challenges you to count the vertices, faces or edges of your shape.

Count while the shape is still hidden in the bag.

Say aloud the number of vertices, faces or edges of your shape and reveal the shape.

If you are correct, score 2 points.

Swap roles.

To win:

The winner is the first player to score 10 points.