

Power play

this game of three-in-a-row with a partner. You will need: different coloured counters, a dice and this railway timetable.

RT									
Greenhill	06:42	10:02	13:22	16:42	20:02	23:22			
Amington	06:57	10:17	13:37	16:57	20:17	23:37			
Wood End	07:18	10:38	13:58	17:18	20:38	23:58			
Amington	07:27	10:47	14:07	17:27	20:47	00:07			
Rich	07:42	11:02	14:22	17:42	21:02	00:22			
Woodford	08:05	11:25	14:45	18:05	21:25	00:45			

1 counter on START.

2 dice. Move your counter that number of squares right. Roll the dice again. Move your counter that number of squares down.

3 fact about the square you land on. For example, if you have rolled a 3 and a 4, you could say: 'The twenty-two minutes past 1 train Greenhill arrives at Amington at seven minutes past 2.'

4 you and your partner agree this is a correct fact, place your plastic counter on the square.

5 turns with your partner, alternating between moving to left, right, up and down.

6 winner is the first person to place three counters in a row.



Try inventing your own game where your partner has to work out the time different trains take!

What is volume?

1 What is the volume of each shape?

a) unit cubes

b) unit cubes

c) unit cubes

d) unit cubes

e) unit cubes

f) unit cubes

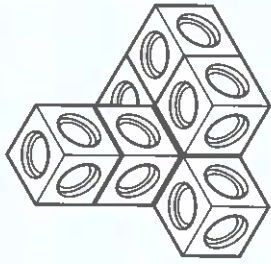
2 Match the shapes to the correct volume.

6 unit cubes

8 unit cubes

12 unit cubes

16 unit cubes



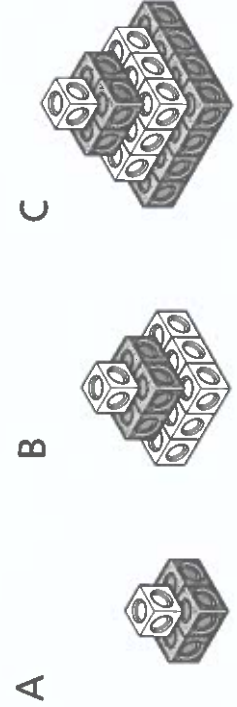
The volume of this 3D shape is 6 unit cubes.



Richard

Do you think Richard is correct? Explain your answer.

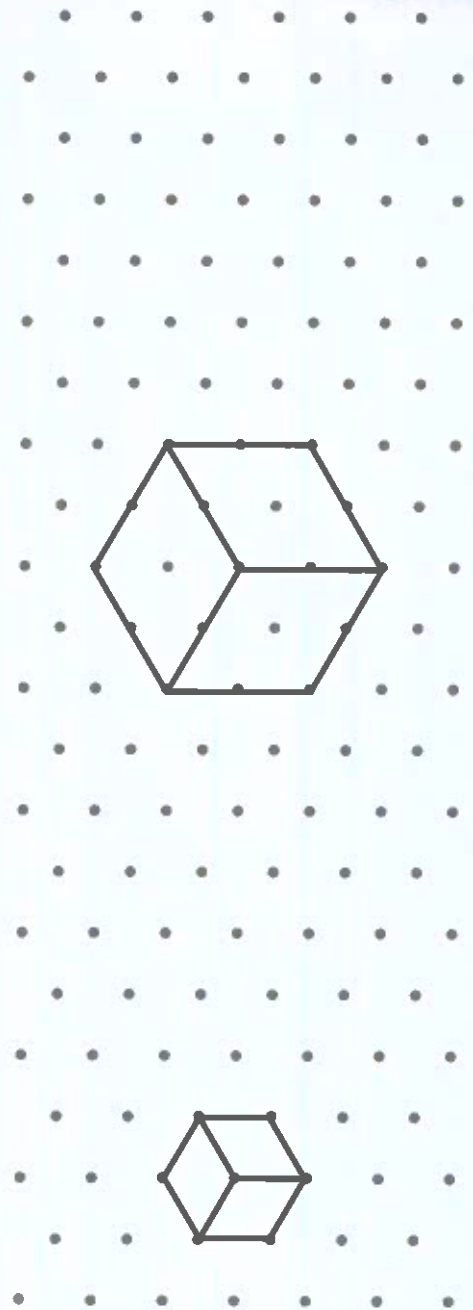
What is the volume of each of the following shapes?



Shape	Volume
Shape A	5 unit cubes
Shape B	unit cubes
Shape C	

Explain how you got your answers.

Draw a copy of each cube on the isometric grid.



6 Max uses 4 unit cubes to make a 3D shape.

Draw as many different 3D shapes as you can with 4 unit cubes on the isometric grid below.



CHALLENGE

Reflect

Explain what is meant by volume. How do you measure volume?
