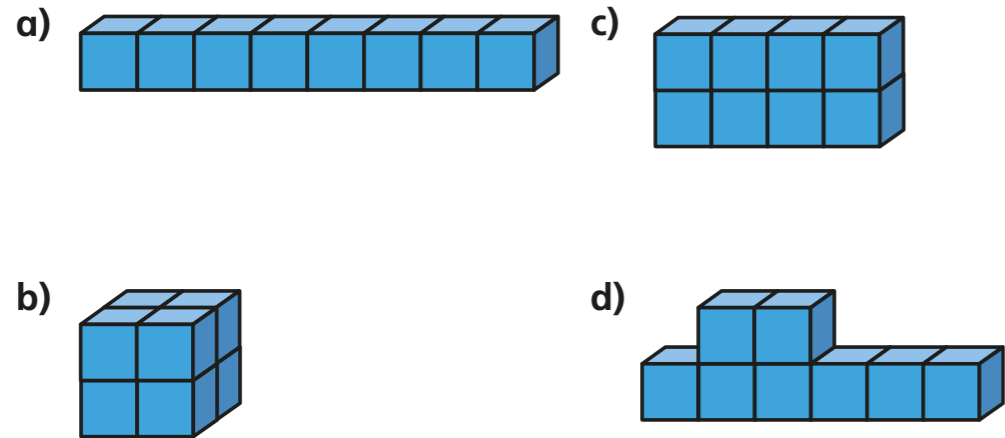
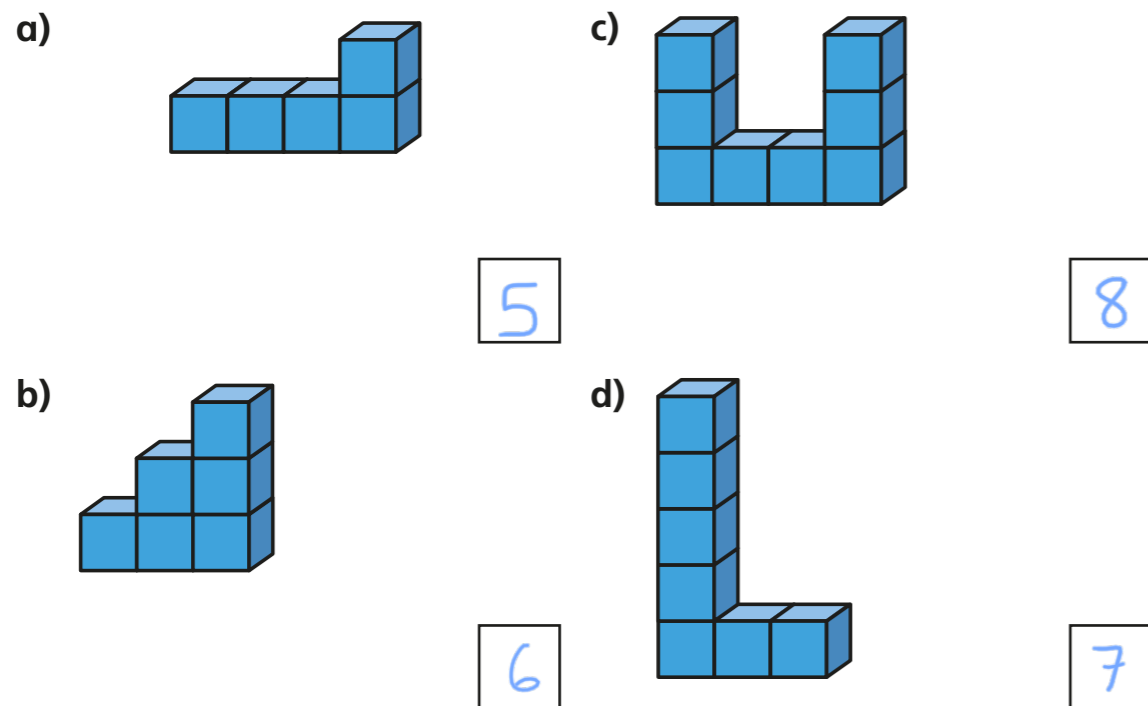


Make 3D shapes

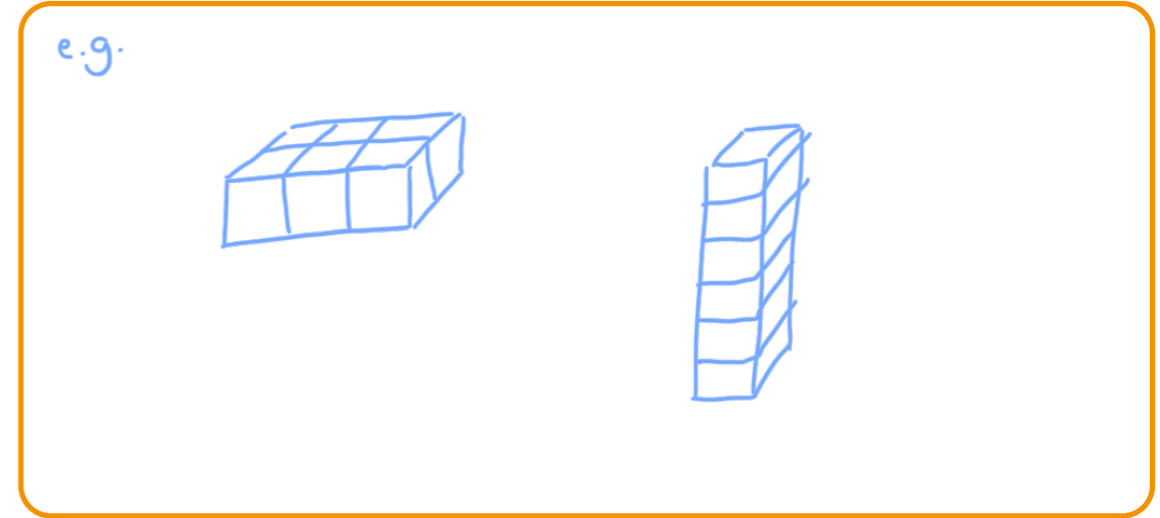
1 Take 8 cubes.
Make each of the 3D shapes.



2 How many cubes do you need to make each 3D shape?

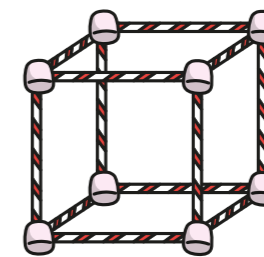


3 Take 6 cubes.
How many different cuboids can you make?
Draw them here.



Compare answers with a partner.
What is the same? What is different?

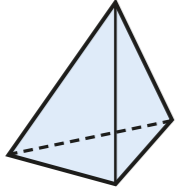
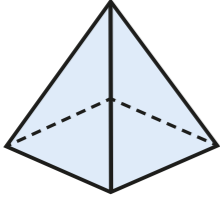
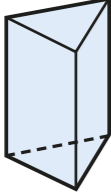
4 Annie makes a cuboid using some straws and marshmallows.



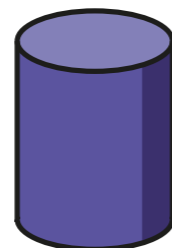
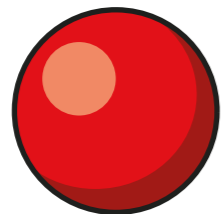
- a) What did she use to make the edges of the cube? straws
- b) How many edges does the cube have? 12
- c) What did she use for the vertices of the cube? marshmallows
- d) How many vertices does the cube have? 8



- 5 How many straws and marshmallows would you need to make each 3D shape?

3D shape	Number of edges (straws)	Number of marshmallows (vertices)
	6	4
	8	5
	9	6

- 6 Try to make the shapes using cubes.

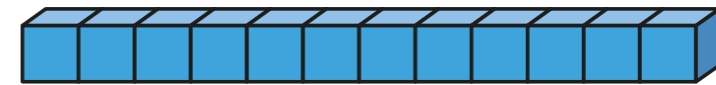


Is it possible? No

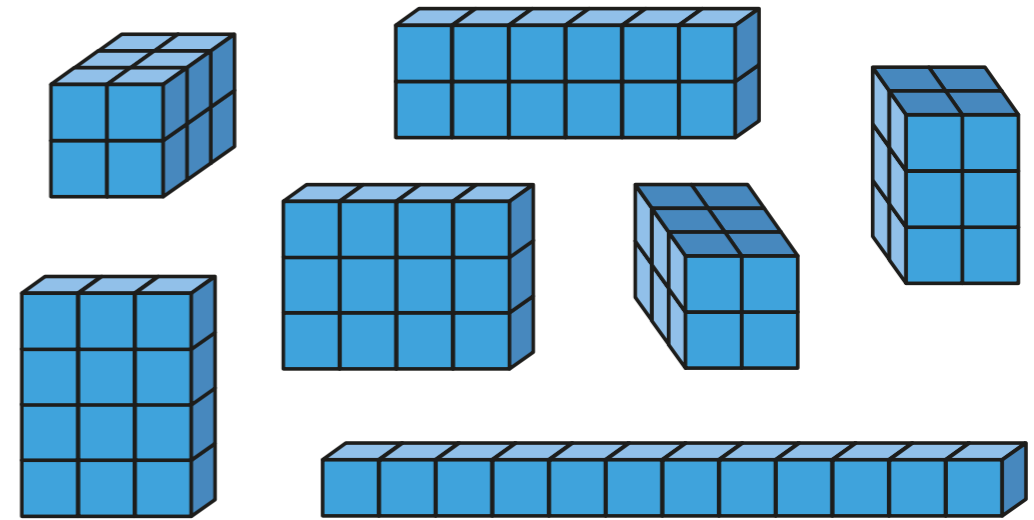
Talk to a partner about what you found.



- 7 Filip has 12 cubes.



He puts them together to make cuboids.

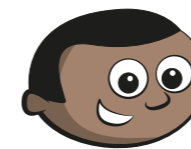
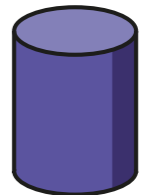


How many **different** cuboids has Filip made?

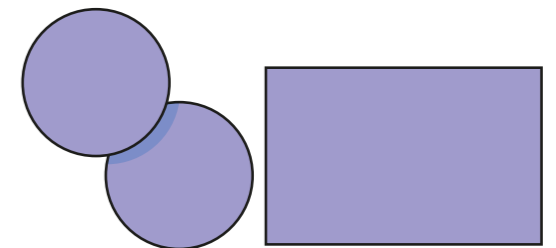
4

- 8 Mo is trying to make a cylinder.

He has some circles of paper and some rectangular card.



I do not think I can make the cylinder from these.



Show how Mo can make the shape.

e.g.



Talk about it with a partner.

