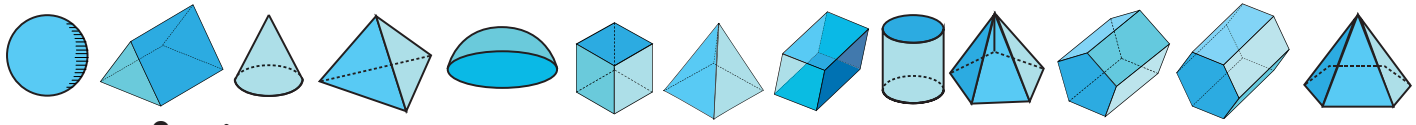
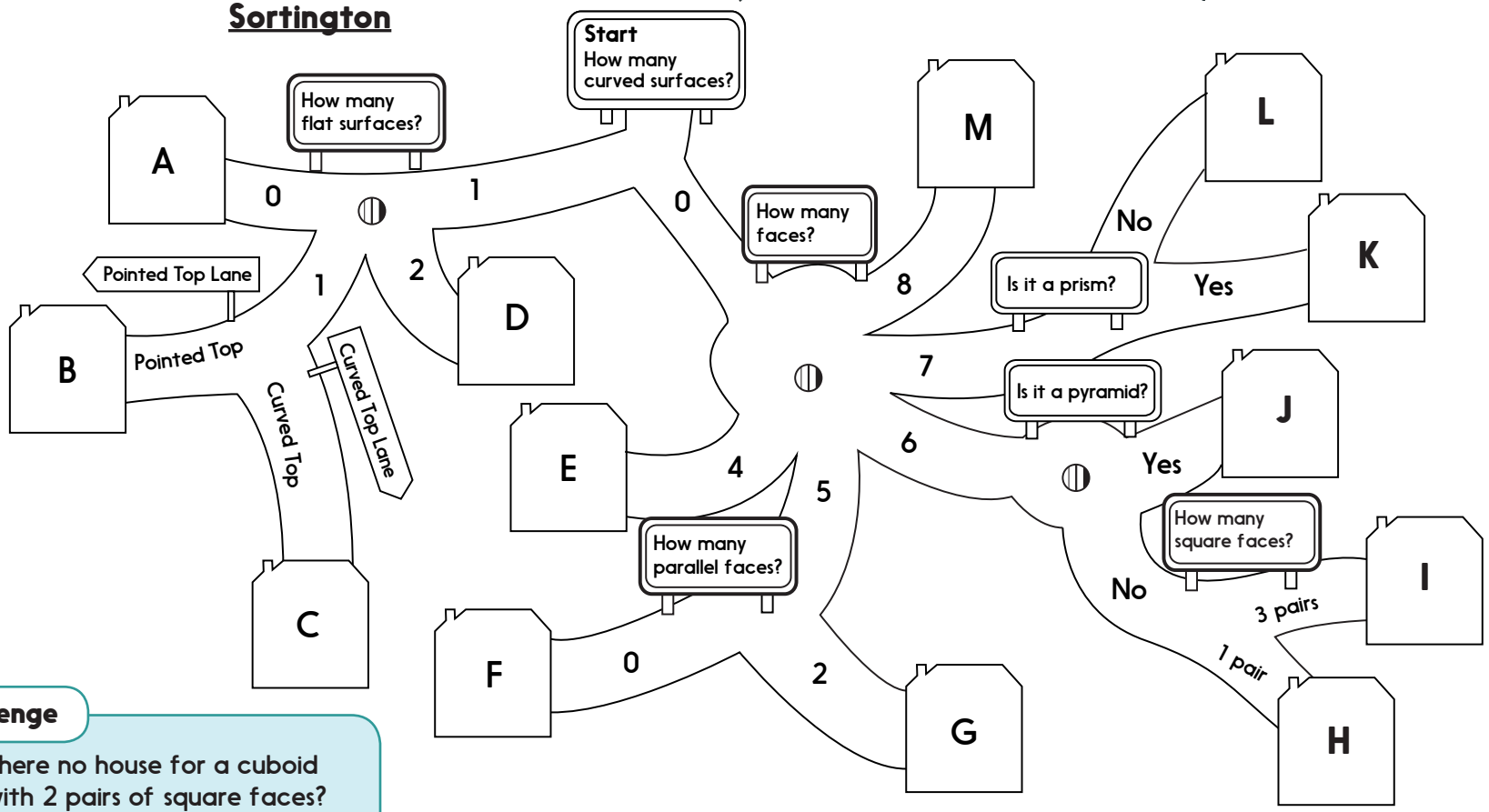
Sorting shapes

The 3-D shapes go on holiday to Sortington! Work out which houses they all live in.
Write the letter and the shape's name.



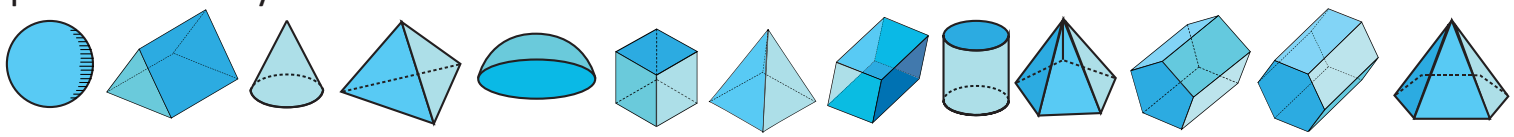


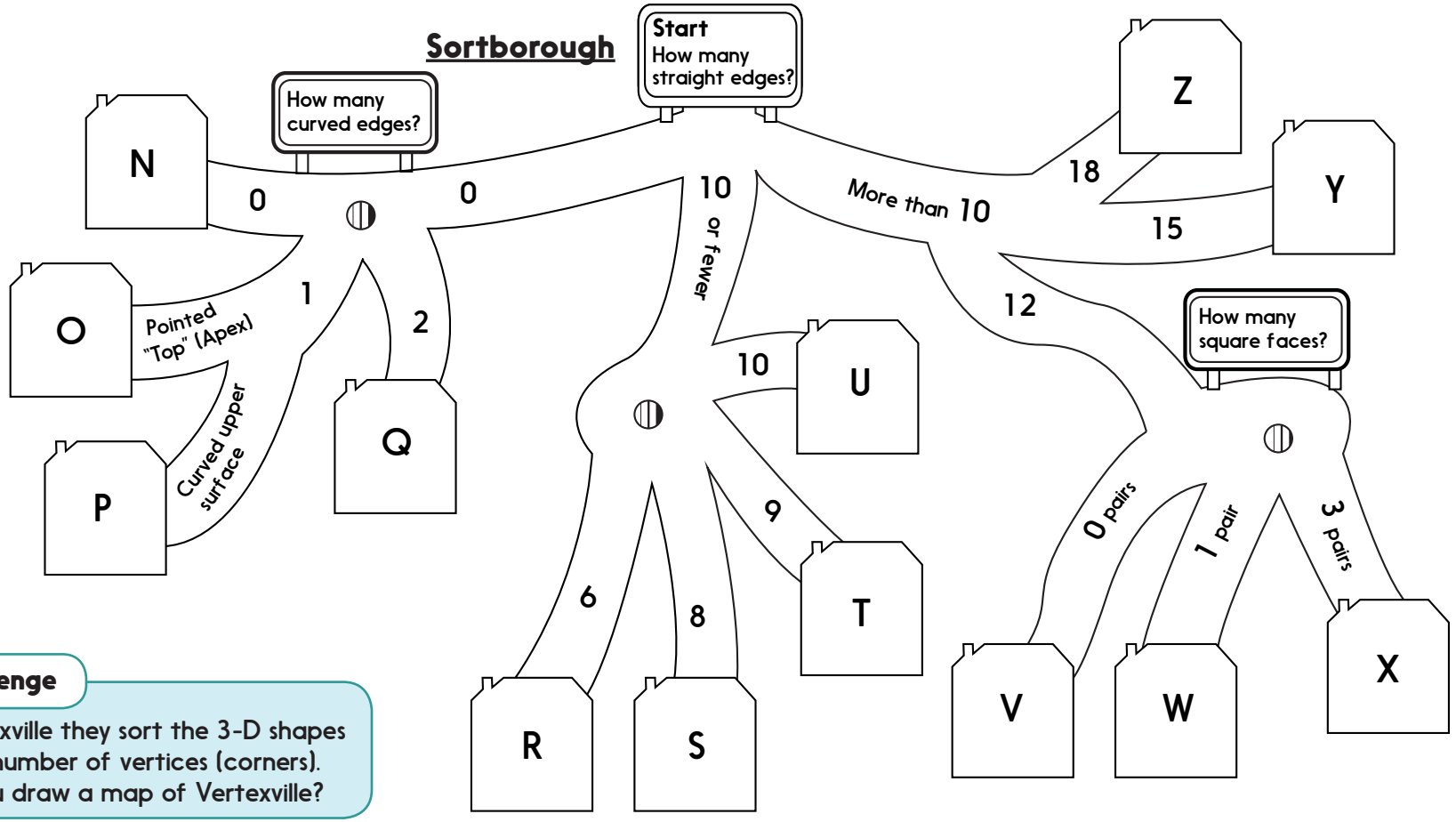
Challenge

Why is there no house for a cuboid shape with 2 pairs of square faces?

Sorting shapes

The 3-D shapes go on holiday to Sortborough! Work out which houses they all stay in.
Match each shape to a letter. Do you know their names?





Challenge

In Vertexville they sort the 3-D shapes by the number of vertices (corners). Can you draw a map of Vertexville?

Shape

Answers

Day 1 Sorting shapes

A Sphere
B Cone
C Hemisphere
D Cylinder
E Tetrahedron / Triangle-based pyramid
F Square-based pyramid
G Triangular prism
H Cuboid
I Cube
J Pentagon-based pyramid
K Pentagonal prism
L Hexagon-based pyramid
M Hexagonal prism

Challenge

There is no house for a cuboid shape with 2 pairs of square faces because if a cuboid shape had 2 pairs of square faces the third pair of faces would also have to be square. It would then be sorted into house I.

Day 2 Sorting shapes

N Sphere
O Cone
P Hemisphere
Q Cylinder
R Triangle-based pyramid
S Square-based pyramid
T Triangular prism
U Pentagon-based pyramid
V Hexagon-based pyramid
W Cuboid
X Cube
Y Pentagonal prism
Z Hexagonal prism

Challenge

The map should reflect the shapes having the following number of vertices:

Shape	*Number of vertices*	*Shape*	*Number of vertices*
Sphere	0	Cuboid	8
Triangular prism	6	Cylinder	0
Cone	1	Pentagon-based pyramid	6
Triangle-based pyramid	4	Pentagonal prism	10
Hemisphere	0	Hexagonal prism	12
Cube	8	Hexagon-based pyramid	7
Square-based pyramid	5		