

Mathematics

# **Coordinates and shapes: Solve problems involving 3-D shapes.**

## **Independent Task**

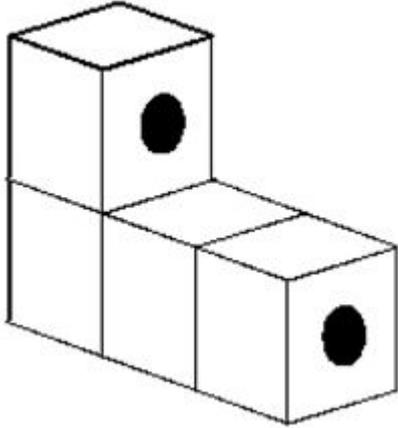
Miss Parsons



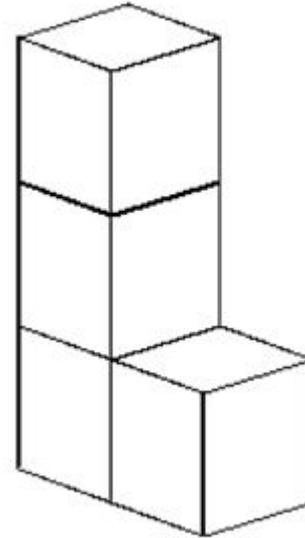
**OAK**  
NATIONAL  
ACADEMY

## Question 1

Sope moves his shape.

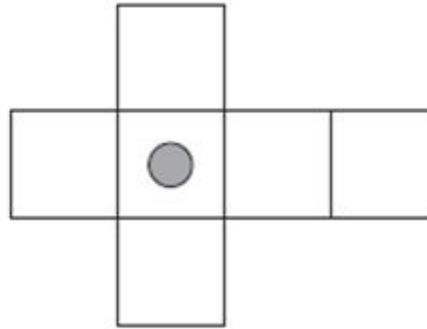
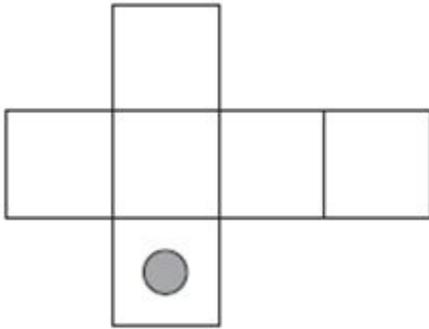


Draw the circles on the shape in its new position.



## Question 2

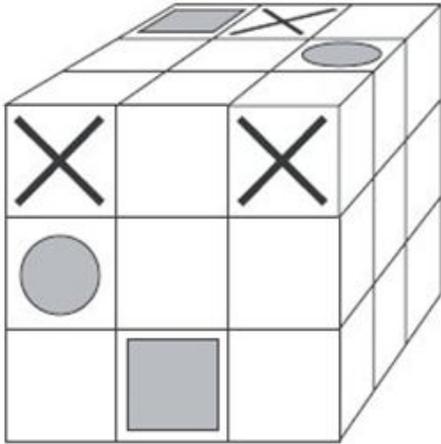
On each shape, draw one more dot so that they have dots on opposite faces.



### Question 3

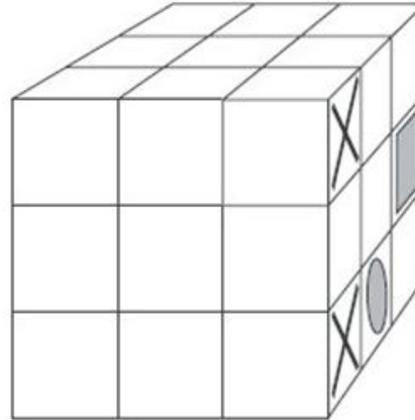
Cubes have been stuck together to make this block.

The block has a pattern on two faces.



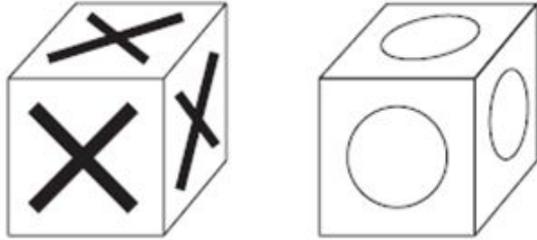
The block is turned to the position below.

Draw the missing parts of the pattern on it.

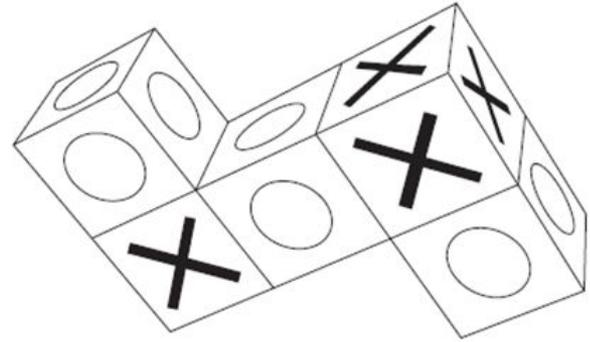


## Question 4

Iman has some cubes with a cross on each face and some cubes with a circle on each face.



She sticks five cubes together to make this shape.

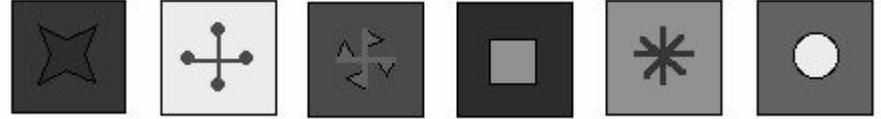


How many crosses and how many circles are there on the **outside** of the shape?

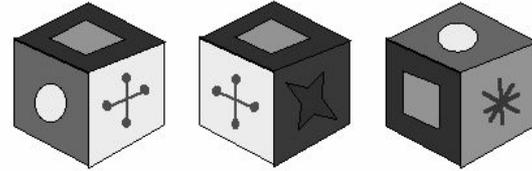


## Question 5

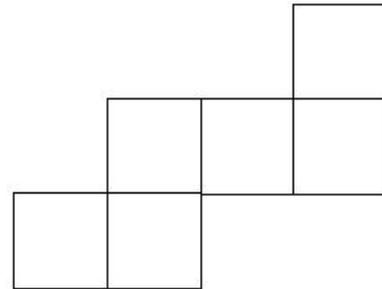
Here are the six faces of a cube, in no particular order.



Here are three views of the cube:



Can you deduce where the faces are in relation to each other and record them on the net of this cube?



Source: The  
Nrich Maths  
Project  
Cambridge

