Maths

## Faces, Edges and Vertices

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## Faces, edges and vertices

1. Fill in the blanks below.
a) The flat surfaces of 3D shapes are called
$\qquad$ .
b) A line segment, joining two vertices of a 3D shape is called an $\qquad$ .
c) The corners of a 3D shape where two or more line segments meet are called $\qquad$ .
$\qquad$

2. a) Complete the table below.

|  | Number <br> of faces | Number <br> of vertices | Number of <br> edges |
| :--- | :--- | :--- | :--- |
| Cube |  |  |  |
| Triangular <br> based pyramid |  |  |  |
| Square-based <br> pyramid |  |  |  |
| Triangular <br> prism |  |  |  |

b) Can you find a rule to find the number of edges from the number of faces and vertices?

Answers

## Faces, edges and vertices

1. Fill in the blanks below.
a) The flat surfaces of 3D shapes are called
$\qquad$ _.
b) A line segment, joining two vertices of a 3D shape is called an edge
c) The corners of a 3D shape where two or more line segments meet are called vertices

face
2. a) Complete the table below.

|  | Number <br> of faces | Number <br> of vertices | Number of <br> edges |
| :--- | :---: | :---: | :---: |
| Cube | 6 | 8 | 12 |
| Triangular <br> based-pyramid | 4 | 4 | 6 |
| Square-based <br> pyramid | 5 | 5 | 8 |
| Triangular <br> prism | 5 | 6 | 9 |

b) Can you find a rule to find the number of edges from the number of faces and vertices? $\begin{aligned} & \text { Number of edges }=\text { number of } \\ & \text { faces + number of vertices }-2\end{aligned}$

