

# GRAYS TUITION CENTRE – Online Tutoring

**WEEK: 10**

**Week Beginning: (22/02/2021)**

**Subject: MATHS**

**Year: 2**

## Lesson Objective:

- Understand what Two-dimensional and Three-dimensional shapes are and what their properties are
- Be able to name Two-dimensional and Three-dimensional shapes and compare vertices, edges and faces

## Class Worksheets

- The tutor shall work through the exam style questions with students from past papers and help them formulate a strategy to answering these questions

## Homework

- The homework will be similar to the class work to make sure the students have a good understanding of the class work; the questions vary from easy to hard so that the students can challenge themselves and see the differences in exam questions

## Additional Notes

- All lesson worksheets and **homework for next week (due Week 11)** worksheets can be found below
- If the students have any questions, we can address those first before moving on to today's lesson plan
- Week 9 homework will be marked in lesson hence make sure it is fully complete

## Two-dimensional shapes:

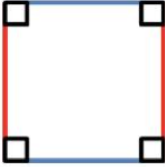
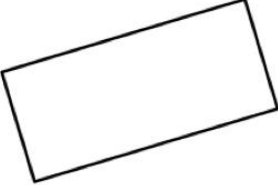
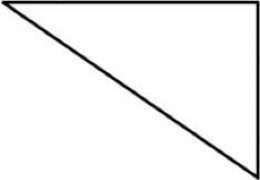

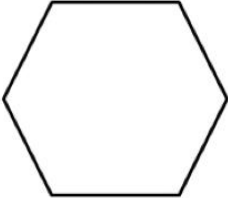

A two-dimensional (2D) shape has only two measurements, such as length and height.

Side: a line in a 2D shape is called a side

Right Angles: a corner of a shape at a  $90^\circ$  angle











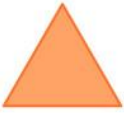
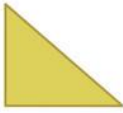
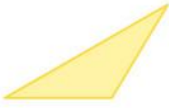



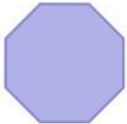







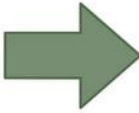
Parallel Lines: Lines that never meet

First one is done for you.

		
Sides: 4 Right angles: 4 Pairs of Parallel lines: 2	Sides: Right angles: Pairs of Parallel lines:	Sides: Right angles: Pairs of Parallel lines:
		
Sides: Right angles: Pairs of Parallel lines:	Sides: Right angles: Pairs of Parallel lines:	Sides: Right angles: Pairs of Parallel lines:

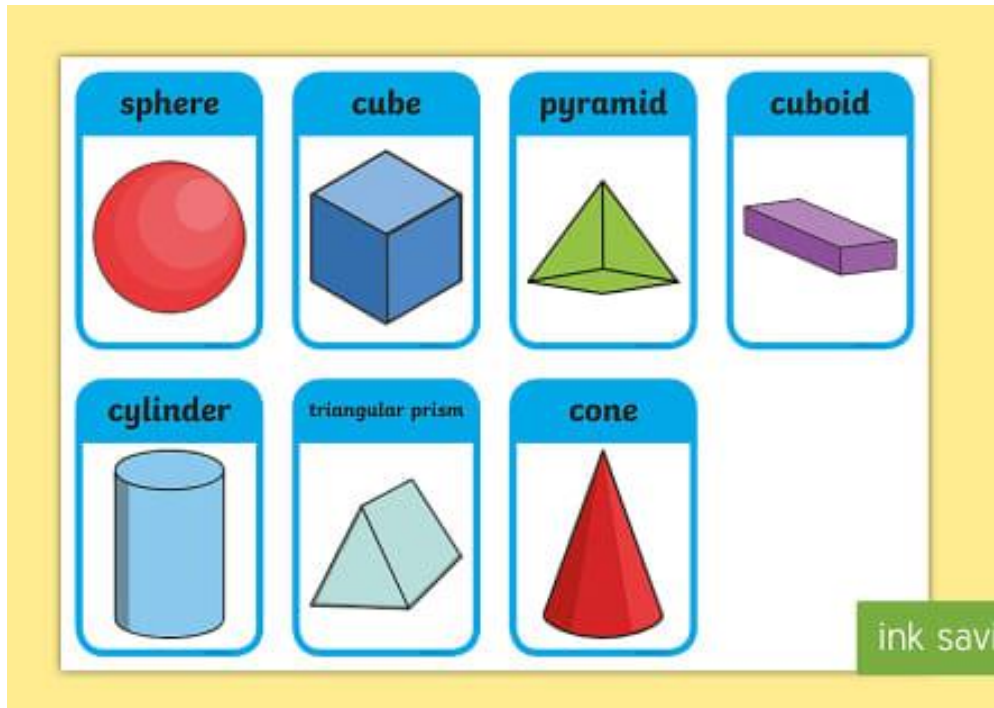
Write how many sides each of the shapes have in the middle. First one is done for you.

## Shapes

 Circle	 Ellipse	 Oval	 Square	 Rectangle
 Rectangle	 Trapezium	 Parallelogram	 Rhombus	 Kite
 Triangle	 Right triangle	 Scalene triangle	 Pentagon	 Hexagon
 Heptagon	 Octagon	 Nonagon	 Decagon	 Star
 Heart	 Crescent	 Cross	 Pie	 Arrow

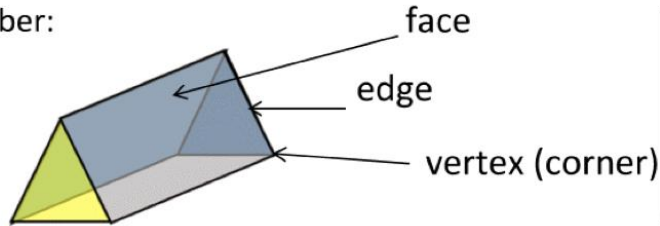
## Three-dimensional shapes:

A three-dimensional (3D) shape because it has three measurements (length, height, and width) and is sometimes called a 'solid' shape.

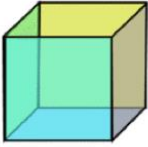
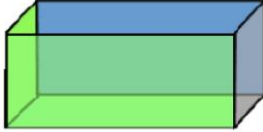


For each shape, write down the number of faces, edges and vertices it has. If you are not sure, can you find or make an example of the shape to have a look at.

Remember:




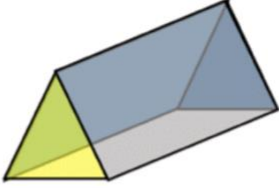
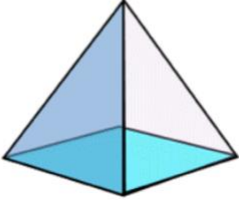
A triangular prism has 5 faces, 9 edges and 6 vertices.

Shape	Properties
<p>Name of shape: _____</p> 	<p>Faces:</p> <p>Edges:</p> <p>Vertices:</p>
<p>Name of shape: _____</p> 	<p>Faces:</p> <p>Edges:</p> <p>Vertices:</p>

## 3D SHAPE PROPERTIES SHEET 2



For each shape, write down the number of faces, edges and vertices.

Shape	Properties
Name of shape: 	Faces:  Edges:  Vertices:
Name of shape: 	Faces:  Edges:  Vertices:
Name of shape: 	Faces:  Edges:  Vertices:










**Homework:**

**Match the following shapes to the correct name:**



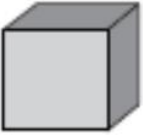



**Naming Regular 2D Shapes**

Draw lines to match the 2D shapes to their correct name.







	•	•	rectangle
	•	•	oval
	•	•	circle
	•	•	triangle
	•	•	hexagon
	•	•	square
	•	•	pentagon

## Name of Solid Shapes

A) Choose the correct name of each shape.

<p>1)</p>  <div style="margin-left: 100px;"> <input type="checkbox"/> Rectangular prism  <input type="checkbox"/> Cylinder  <input type="checkbox"/> Cone         </div>	<p>2)</p>  <div style="margin-left: 100px;"> <input type="checkbox"/> Pyramid  <input type="checkbox"/> Sphere  <input type="checkbox"/> Cone         </div>
<p>3)</p>  <div style="margin-left: 100px;"> <input type="checkbox"/> Cube  <input type="checkbox"/> Rectangular prism  <input type="checkbox"/> Cylinder         </div>	<p>4)</p>  <div style="margin-left: 100px;"> <input type="checkbox"/> Cylinder  <input type="checkbox"/> Sphere  <input type="checkbox"/> Cube         </div>
<p>5)</p>  <div style="margin-left: 100px;"> <input type="checkbox"/> Rectangular prism  <input type="checkbox"/> Cylinder  <input type="checkbox"/> Pyramid         </div>	<p>6)</p>  <div style="margin-left: 100px;"> <input type="checkbox"/> Cube  <input type="checkbox"/> Rectangular prism  <input type="checkbox"/> Cone         </div>

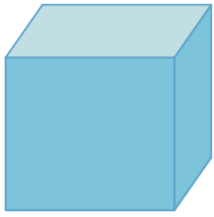
B) Choose the correct choice that best describes each object.

<p>1)</p>  <div style="margin-left: 100px;"> <input type="checkbox"/> Pyramid  <input type="checkbox"/> Cylinder  <input type="checkbox"/> Cone         </div>	<p>2)</p>  <div style="margin-left: 100px;"> <input type="checkbox"/> Sphere  <input type="checkbox"/> Cube  <input type="checkbox"/> Cylinder         </div>
<p>3)</p>  <div style="margin-left: 100px;"> <input type="checkbox"/> Rectangular prism  <input type="checkbox"/> Cube  <input type="checkbox"/> Pyramid         </div>	<p>4)</p>  <div style="margin-left: 100px;"> <input type="checkbox"/> Cone  <input type="checkbox"/> Rectangular prism  <input type="checkbox"/> Cube         </div>
<p>5)</p>  <div style="margin-left: 100px;"> <input type="checkbox"/> Cone  <input type="checkbox"/> Cylinder  <input type="checkbox"/> Sphere         </div>	<p>6)</p>  <div style="margin-left: 100px;"> <input type="checkbox"/> Pyramid  <input type="checkbox"/> Rectangular prism  <input type="checkbox"/> Cone         </div>



Identify each shape as 2D or 3D, and check the appropriate box.

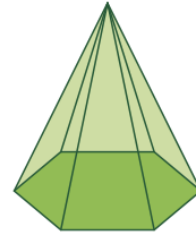
1)



2D

3D

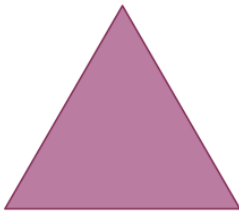
2)



2D

3D

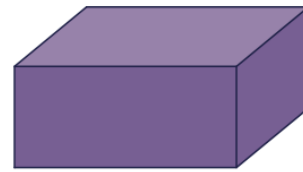
3)



2D

3D

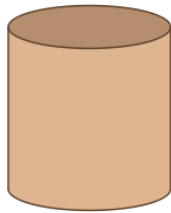
4)



2D

3D

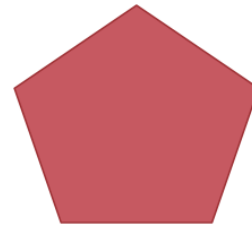
5)



2D

3D

6)



2D

3D

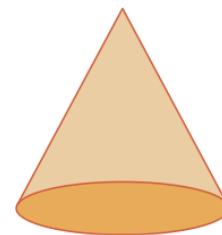
7)



2D

3D

8)


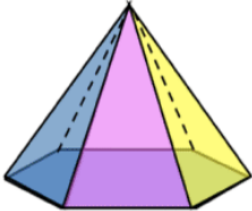
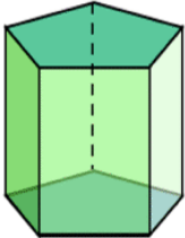


2D

3D

Harder Questions: Optional Homework

For each shape, write down the number of faces, edges and vertices.

Shape	Properties
<p>Name of shape:</p> 	<p>Faces:</p> <p>Edges:</p> <p>Vertices:</p>
<p>Name of shape:</p> 	<p>Faces:</p> <p>Edges:</p> <p>Vertices:</p>
<p>Name of shape:</p> 	<p>Faces:</p> <p>Edges:</p> <p>Vertices:</p>

