## Revise

## Compare and classify 2D shapes based on their properties

2D shapes have two dimensions - length and width.
A polygon is a 2D shape with straight sides. Polygons are compared and classified according to the properties of their sides and angles.

## Key Vocabulary

Regular - A polygon that has all sides and angles equal.
Parallel - Lines that always stay the same distance apart and never meet.
Adjacent - Angles or sides that are next to each other.

Triangles have 3 sides and 3 vertices.

The total of the angles in a triangle is $\mathbf{1 8 0}^{\circ}$.


A scalene triangle has no equal sides or angles.


This is a rightangled triangle as one of its angles is $90^{\circ}$. It is also scalene.


An equilateral triangle is a regular polygon. It has sides of equal length and each angle is $60^{\circ}$.


An isosceles triangle has two sides of equal length and two angles of equal size.


This is a rightangled triangle as one of its angles is $90^{\circ}$. It is also isosceles.

A quadrilateral is a polygon with four sides.

A square has four sides of equal length and four right angles ( $90^{\circ}$ ). A square is also a rectangle, a rhombus and a parallelogram!

A rectangle has two pairs of parallel, equal sides and four right angles. A rectangle is also a parallelogram!


A parallelogram has two pairs of parallel, equal sides and opposite equal angles.

This is an isosceles trapezium as it has two sides of equal length and two pairs of equal angles.

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## Key Vocabulary

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Adjacent - Angles or sides that are next to each other.

A rhombus has four sides of equal length and opposite equal angles.
A rhombus is also a parallelogram!

A trapezium only has one pair of opposite parallel sides.



A kite has two pairs of adjacent equal sides and one pair of opposite equal angles.

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A regular pentagon has five equal sides and five equal angles of $108^{\circ}$.

In regular and irregular pentagons, the interior angles will total $540^{\circ}$.


A regular heptagon has seven equal sides and seven equal angles.

In regular and irregular heptagons, the interior angles will total $900^{\circ}$.


A regular hexagon has six equal sides and six equal angles of $120^{\circ}$.
In regular and irregular hexagons, the interior angles will total $720^{\circ}$.


A regular octagon has eight equal sides and eight equal angles of $135^{\circ}$.
In regular and irregular octagons, the interior angles will total $1080^{\circ}$.

## Quiz

Compare and classify 2D shapes based on their properties

How many of these 2D shapes are polygons?

3 $\square$ 5

## Teqragath!

## Quiz

Compare and classify 2D shapes based on their properties

How many of these 2D shapes are regular polygons?


Tegrogath!

## Quiz

Compare and classify 2D shapes based on their properties

How many of these 2D shapes are parallelograms?


3


1
Tegrogath!

## Quiz

## Compare and classify 2D shapes based on their properties

What type of triangle is this?


Equilateral
Teiprogath!

## Quiz

## Compare and classify 2D shapes based on their properties

How many more sides does a hexagon have than a rhombus?


3

1

Teiprogath!

## Quiz

## Compare and classify 2D shapes based on their properties

# How many more sides does a nonagon have than a pentagon? 

$$
2
$$

3


Tegrogath!

How many fewer sides does a trapezium have than a decagon?

## 5



4

Teigrogath!

How many sides are there altogether in a parallelogram, triangle and heptagon?

10

12


Tegrogath!

## Quiz

## Compare and classify 2D shapes based on their properties

How many sides are there altogether in a kite, octagon and hexagon?
$\square$

16

14

Choose another objective
Teqragath!

