WALT identify regular and irregular polygons and their angles.
WILF:

- Identify regular and irregular polygons.
- Use your knowledge of shapes and angles to help you.
- Use a protractor to measure angles in a shape.
- Use a ruler to measure lengths.



## What is a polygon?

What is the difference between a regular and an irregular polygon?

Recap:

## What is a polygon?

A polygon is a shape with straight sides.
What is the difference between a regular and an irregular polygon? A regular polygon has straight sides of equal lengths, whereas an irregular polygon has unequal length sides and different angles.

## Varied Fluency 2

## Identify the name of this shape.

Use a ruler and a protractor to decide whether it is a regular or irregular polygon.


Remember to line the middle of your protractor up with the vertex (example above) and a line up with 0 , then follow the same number line along for the measurement - so if it's the bottom 0 , stay with the bottom numbers.

## Varied Fluency 2

## Identify the name of this shape.

Use a ruler and a protractor to decide whether it is a regular or irregular polygon.


This is a hexagon. It is a regular polygon.

## Varied Fluency 4

## Draw a regular pentagon.

Measure the length of each side and the size of each angle to make sure that they are equal.

## Varied Fluency 4

## Draw a regular pentagon.

Measure the length of each side and the size of each angle to make sure that they are equal.

You should have drawn a 5 -sided shape.

The sides should all be the same length and all angles should measure $108^{\circ}$.


## Reasoning 2

## Jodie says:

A rhombus and a square are both regular polygons because they both have sides of equal length.


Is Jodie correct? Explain your answer.

## Reasoning 2

## Jodie says:

A rhombus and a square are both regular polygons because they both have sides of equal length.


Is Jodie correct? Explain your answer.
Jodie is incorrect. A square is a regular polygon as it has sides of equal length and each angle measures $90^{\circ}$. However, a rhombus may have 4 sides of equal length, but it does not have 4 angles of equal size.

Please have a go at today's activity.
Remember to measure your angles and lengths carefully and to use reasoning to explain your answers.


