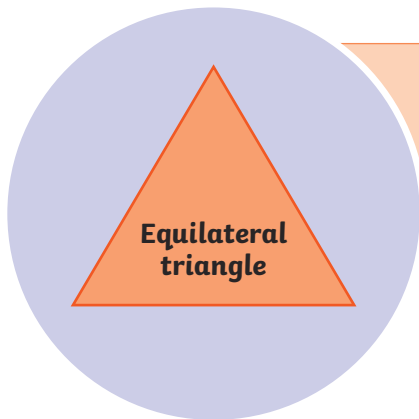# Regular Polygons

A polygon is a shape with **straight** sides.
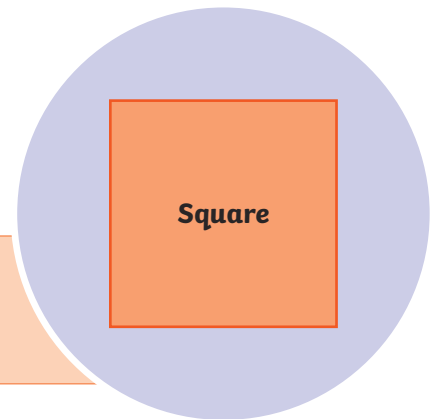
If all the sides are equal in the length and the angles are equal in size, the shape is **regular.**

Regular shapes have equal sides **and** equal angles.

Equilateral triangle
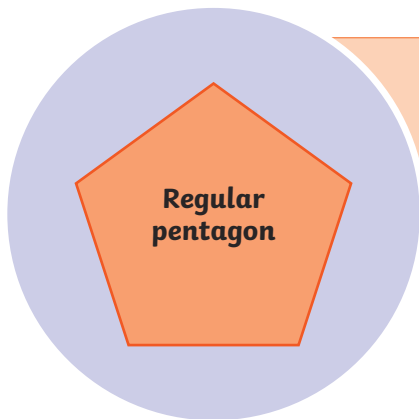
Regular triangle
3 equal sides
3 equal angles

Regular quadrilateral
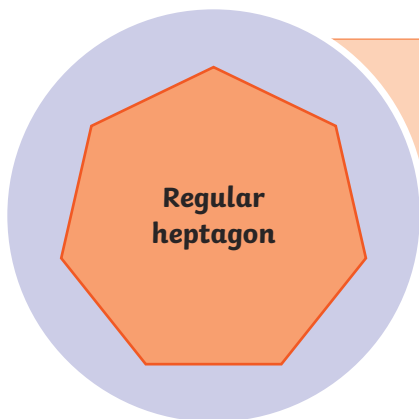4 equal sides
4 equal angles

Square

Regular pentagon

Regular pentagon
5 equal sides
5 equal angles

Regular hexagon
6 equal sides
6 equal angles
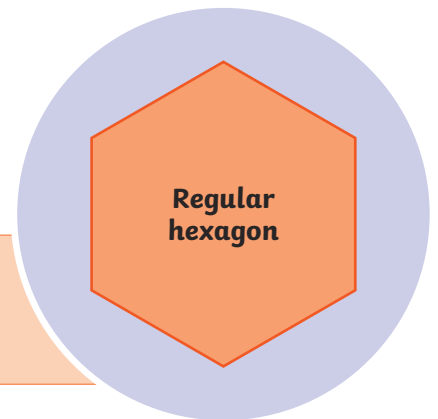
Regular hexagon

Regular heptagon

Regular heptagon
7 equal sides
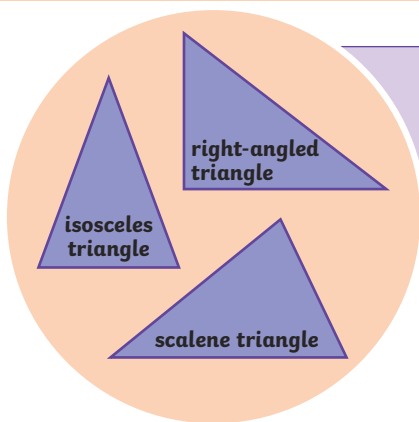7 equal angles
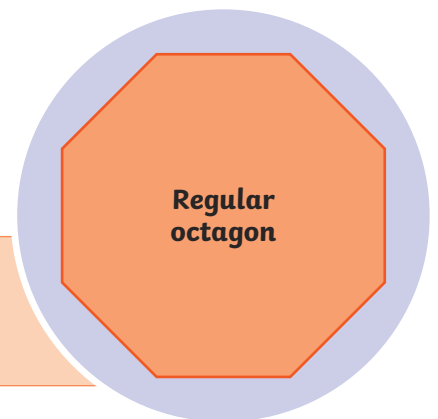
Regular octagon
8 equal sides
8 equal angles

Regular octagon

Irregular Polygons

A polygon is a shape with **straight** sides.

If all of the sides are not equal lengths or all of the angles are not equal sizes, the shape is **irregular**.

Irregular shapes have sides of **different lengths** and angles of **different sizes**.

right-angled triangle

isosceles triangle

scalene triangle

Irregular triangle – isosceles, scalene or right angled

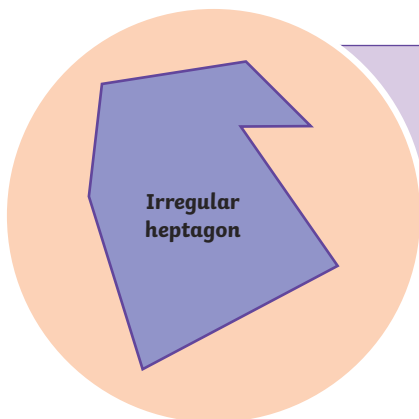3 sides – with different lengths

3 angles – different sizes
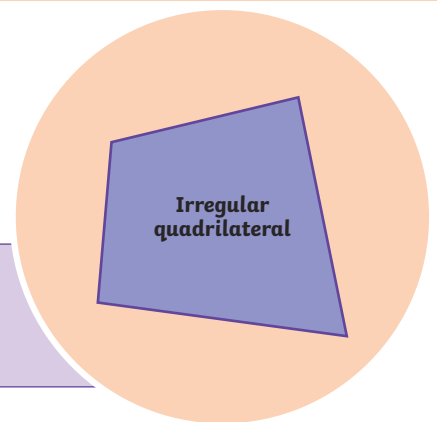
Irregular quadrilateral

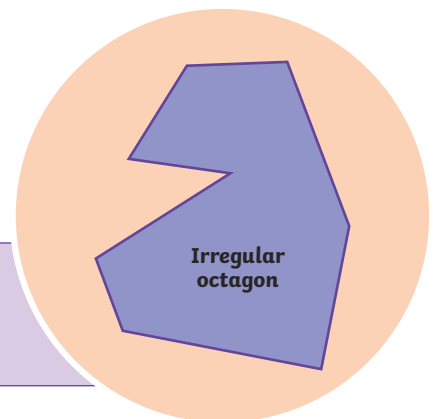4 sides – with different lengths

4 angles – different sizes

Irregular quadrilateral
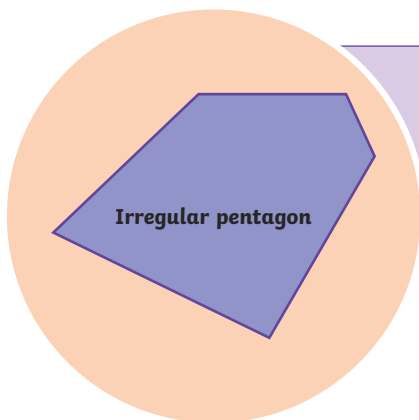
Irregular pentagon

5 sides – with different lengths

5 angles – different sizes

Irregular pentagon
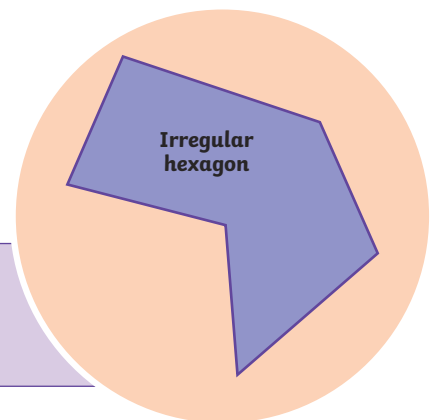
Irregular hexagon

6 sides – with different lengths

6 angles – different sizes

Irregular hexagon

Irregular heptagon

7 sides – with different lengths

7 angles – different sizes

Irregular heptagon

Irregular octagon

8 sides – with different lengths

8 angles – different sizes

Irregular octagon