

# DEVELOPING GEOMETRY...

## Angles in parallel lines and polygons

@whisto\_maths

### What do I need to be able to do?

By the end of this unit you should be able to:

- Identify alternate angles
- Identify corresponding angles
- Identify co-interior angles
- Find the sum of interior angles in polygons
- Find the sum of exterior angles in polygons
- Find interior angles in regular polygons

### Keywords

**Parallel:** Straight lines that never meet

**Angle:** The figure formed by two straight lines meeting (measured in degrees)

**Transversal:** A line that cuts across two or more other (normally parallel) lines

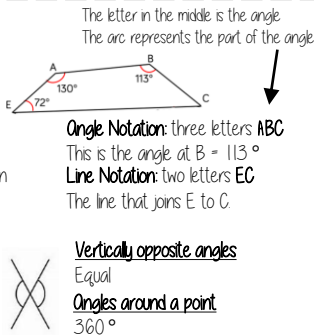
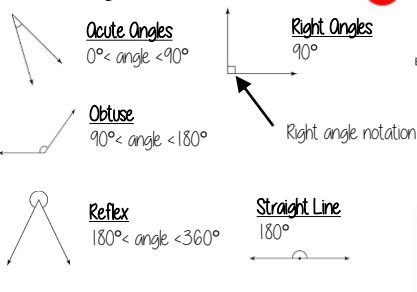
**Isosceles:** Two equal size lines and equal size angles (in a triangle or trapezium)

**Polygon:** A 2D shape made with straight lines

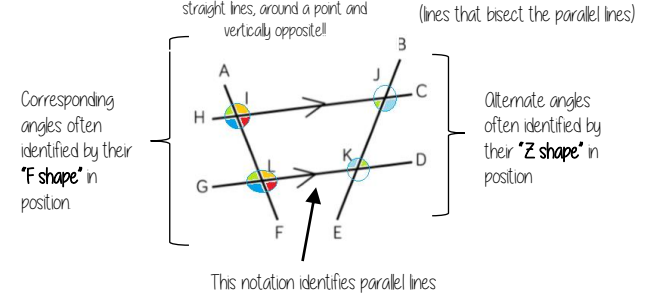
**Sum:** Addition (total of all the interior angles added together)

**Regular polygon:** All the sides have equal length; all the interior angles have equal size

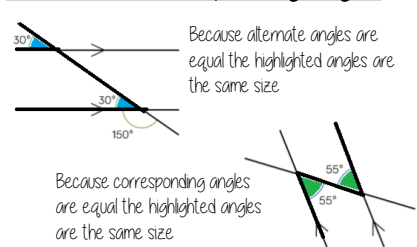
### Basic angle rules and notation



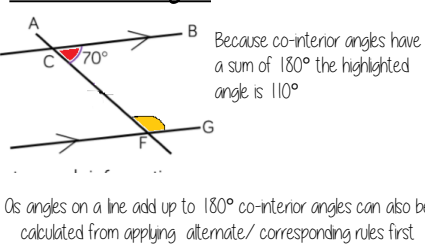
### Parallel lines



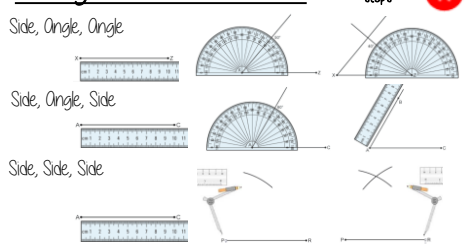
### Alternate/Corresponding angles



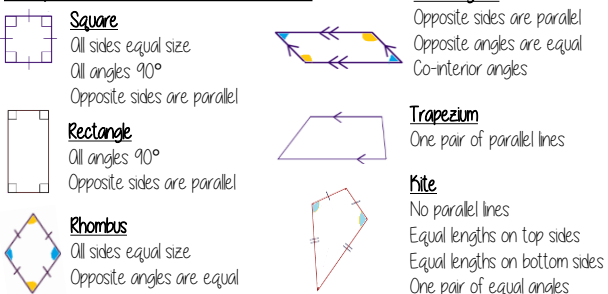
### Co-interior angles



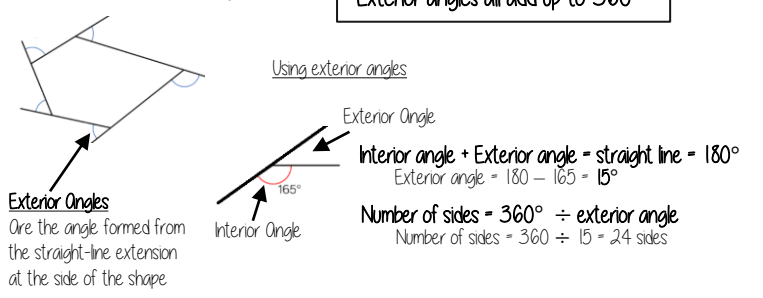
### Triangles & Quadrilaterals



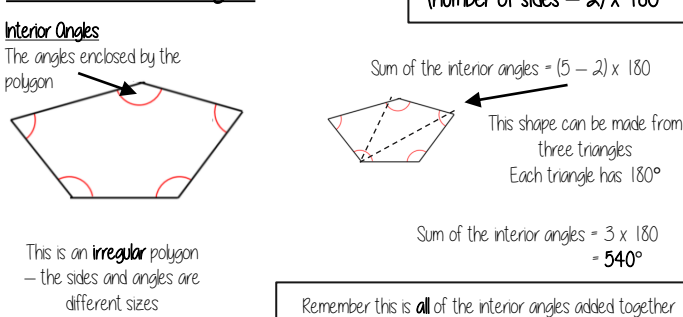
### Properties of Quadrilaterals



### Sum of exterior angles



### Sum of interior angles



### Missing angles in regular polygons

