## Year 10 Maths Learning Journey

## Spring Term 2

## Geometry: Circles

| Core knowledge | Reference |
| :--- | :---: |
| Recognise and label parts of a circle (R) <br> "What's the difference between a segment and a sector?" | WORKSHEET |
| Calculate fractional parts of a circle <br> "What are the formulae for the area and circumference of a circle? How do you remember which <br> is which?" | WORKSHEET |
| Calculate the length of an arc <br> "Why is the perimeter of a semicircle not just half the circumference of the circle?" |  |
| Calculate the area of a sector <br> "If the angle formed by a sector is e.g. 80 degrees, what fraction of the circle is the sector?" | WORKSHEET |
| Circle theorem: Angles at the centre and circumference (H) <br> "How do you identify the 'angle at the centre' and the 'angle at the circumference'?" |  |
| Circle theorem: Angles in a semi-circle (H) <br> "What is the 'angle at the centre' of a circle if we have a diameter?" | WORKSHEET |

## Learning Checkpoints

| LC Title | Completed | Dirt |
| :--- | :--- | :--- |
| Circles |  |  |

## Key Vocabulary:

Arc - Fractional part of a circumference.
Chord - Line going from one part of a circumference to another.

Cyclic - Formed within a circle or being circular by nature.

Diameter - Line going from one part of the circumference to another, passing through the centre.
Hemisphere - Half of a sphere.

Isosceles - Having a pair of equal sides/angles.

Major Sector - Sector with centre angle greater than 180 degrees.
Minor Sector - Sector with centre angle less than 180 degrees.

Perpendicular - Meeting at right angles.

Radius - Line going from the centre of a circle to the circumference.

Scale Factor - Multiplicative quantity which describes an enlargement.
Sector - Fractional part of a circle, formed by two radii \& and arc.

Segment - Part of a circle formed by an arc \& a chord.

Semi-circle - Half of a circle.

Subtended - To be opposite or to extend from one side of a line to another.

Surface Area - Measure of space on the surface of an object.

Tangent - Line touching curve in 1 location following the direction of the curve at that point.

