



Year 8 Maths Learning Journey

Summer term 2

Developing geometry: Area of trapezia and circles

Core knowledge	
Calculate the area of triangles, rectangles and parallelograms “How can you find the area of a rhombus? How do you know?”	WORKSHEET
Calculate the area of a trapezium “Compare a rectangle, parallelogram and trapezium. What’s the same and what’s different?”	WORKSHEET
Calculate the perimeter and area of compound shapes (1) “How can you divide this compound shape up into shapes we know how to find the area of? Name each of these shapes”	WORKSHEET
Investigate the area of a circle “How do we find the circumference of a circle?”	WORKSHEET
Calculate the area of a circle and parts of a circle without a calculator “How do you round a number to 1 significant figure?”	WORKSHEET
Calculate the area of a circle and parts of a circle with a calculator “How many decimal places or significant figures should you round your answer to? Why?”	WORKSHEET
Calculate the perimeter and area of compound shapes (2) “Which standard shapes can you identify in the compound shape?”	WORKSHEET

Learning Checkpoints

LC Title	Completed	Dirt
Area of trapezia and circles		

Key Vocabulary:

Approximately: A result that is not exact, but close enough to be used.

Area: a measure of the size of any plane surface. Area is usually measured in square units e.g. square centimetres (cm^2), square metres (m^2).

Compound: Any shape that is made up of two or more geometric shapes.

Decimal place: the position of a digit to the right of a decimal point.

Estimate: To arrive at a rough or approximate answer by calculating with suitable approximations for terms

Formula: An equation linking sets of physical variables. Plural: formulae.

Parallel: In Euclidean geometry, always equidistant. Parallel lines, curves and planes never meet however far they are produced or extended.

Parallelogram: A quadrilateral whose opposite sides are parallel and consequently equal in length.

Perpendicular height: the height of the pyramid measured at a right angle from the base.

Radius: The distance from the centre to the circumference of a circle

Rhombus: A parallelogram with all sides equal.

Sector: A "pie-slice" part of a circle - the area between two radii and the connecting arc of a circle

Significant figures: The run of digits in a number that are needed to specify the number to a required degree of accuracy.

Square: The square of a number is the product of the number and itself.

Substitute: Numbers can be substituted into an algebraic expression in x to get a value for that expression for a given value of x .

Trapezium: a quadrilateral with one pair of parallel sides.