



Topic: Probability (Chapter 5 and 6 WRM1 Chapter 14)

Prior learning:

Estimation
Tally charts
Fractions, decimals and percentages

Two-way tables
Venn Diagrams
Probability language
Money

Learning sequences				Endpoints
	Acquiring	On track	Extending	
Main Learning Steps	<ul style="list-style-type: none"> ■ Understand how to write probability ■ Calculate a basic probability in FDP 	<ul style="list-style-type: none"> ■ Find probability from a table of probabilities ■ Understand and read Venn diagrams ■ Complete two-way tables 	<ul style="list-style-type: none"> ■ Use and understand set notation to find probabilities from Venn diagrams ■ Use product theory to find total number of outcomes ■ Complete GCSE style probability questions 	<ul style="list-style-type: none"> ▪ To understand the meaning of probabilities ▪ To be able to calculate probability in FDP ▪ To use relative frequency ▪ To complete and interpret Venn diagrams ▪ To find the probability from a Venn diagram ▪ To use set notation (H) ▪ To complete sample space diagrams ▪ To list outcomes ▪ To draw and interpret two-way tables ▪ To use product theory
	<p style="text-align: center;">Working towards</p> <ul style="list-style-type: none"> ■ Use relative frequency to find a experimental probability ■ Calculate probabilities ■ List outcomes including menu style questions 	<p style="text-align: center;">Advancing</p> <ul style="list-style-type: none"> ■ Draw Venn diagrams from information given ■ Find probabilities from Venn Diagrams ■ Complete sample space diagrams 		
Assessments	<ul style="list-style-type: none"> • Check of understanding in class and homework • End of unit test 			

Where will we use these ideas again: Data analysis Units of measure	Inequality Probability
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Topic: Algebra (Chapter 7 and 9)

Prior learning:

Familiarity with operations
Concept of inverse

Equivalent and Simplifying
Sequences
Function machines

Substitution

Learning sequences				Endpoints
	Acquiring	On track	Extending	
Main Learning Steps	<ul style="list-style-type: none"> ■ To collect like terms including with indices ■ Solve one step equations with or without function machines 	<ul style="list-style-type: none"> ■ Form algebra expressions ■ Substitute into basic equations ■ Solve equations with brackets ■ Expand simple single bracket 	<ul style="list-style-type: none"> ■ Expand two single brackets and collect like terms ■ Expand double brackets ■ Factorize double brackets ■ Solve inequalities ■ Solve equations with unknowns on both sides 	<ul style="list-style-type: none"> ▪ To collect like terms ▪ To multiply algebra including indices ▪ To multiple algebra including decimals ▪ To form expressions ▪ To complete substitutions ▪ To solve multi-step equations including brackets ▪ To expand brackets ▪ To factorise single brackets ▪ To factorise double brackets (H) ▪ To solve inequalities and plot on a number line (H) ▪ To solve equations with unknown on both sides (H)
	Working towards	Advancing		
	<ul style="list-style-type: none"> ■ Multiply and divide with algebra no indices ■ Solve two-step equations 	<ul style="list-style-type: none"> ■ Multiply and divide with algebra and indices ■ Substitute into more complex equations and formula ■ Expand single brackets with indices ■ Factorize single brackets ■ Write inequalities on a number line ■ Form and solve equations 		
Assessments	<ul style="list-style-type: none"> • Check of understanding in class and homework • End of unit test 			

Where will we use these ideas again:	
Substitution into formulae	Brackets, equations, inequalities
Directed numbers	Forming and solving equations
	Graphs



Topic: Angles and Shape (Chapter 13 and 14)

Prior learning:
 Basic angle facts
 Recognition of shapes

Area of basic shapes
 4 operations

Algebraic notation
 Gradients
 Mean and median

Learning sequences				Endpoints
	Acquiring	On track	Extending	
Main learning steps	<ul style="list-style-type: none"> ■ Find missing angles round a point and on a line ■ Find missing angles in scalene triangles ■ Area and perimeter of squares and rectangles 	<ul style="list-style-type: none"> ■ Identify angles on parallel lines including alternate and corresponding angles ■ Find the area and perimeter of compound shapes 	<ul style="list-style-type: none"> ■ Construct triangles using compasses and protractors ■ Find the sum of interior angles and angles in regular shapes ■ Substitute to find exterior angles ■ Find the area of circles ■ Use geometric proof to support or disprove conjectures 	<ul style="list-style-type: none"> ▪ To find angles on a line and round a point ▪ To find missing angles in a triangle ▪ To find missing angles in quadrilaterals ▪ To find alternate and corresponding angles ▪ To find the area and perimeter of various shapes including compound ▪ To find the area of a trapezium ▪ To complete problem solving questions with area and perimeter ▪ To construct shapes (H) ▪ To find interior and exterior angles (H) ▪ To find the area of circles (H) ▪ To use geometric proof (H)
	Working towards	Advancing		
	<ul style="list-style-type: none"> ■ find missing angles in isosceles triangles ■ Find missing values in quadrilaterals ■ Area and perimeter of triangles 	<ul style="list-style-type: none"> ■ Find the area of trapeziums ■ Complete problem solving with area and perimeter 		
Assessments	<ul style="list-style-type: none"> • Check of understanding in class and homework 			
Where will we use these ideas again: Exterior and interior angles Area of more complex shapes				Volume Surface area Circle theorems



Topic: Pythagoras (H)

Prior learning:
Square numbers

Square roots
Use of a calculator

Learning sequences			Endpoints	
Acquiring	On track	Extending		
Main learning steps		<ul style="list-style-type: none"> Label the hypotenuse on a triangle 	<ul style="list-style-type: none"> Use the formula to find the length of the hypotenuse on a right-angle triangle Use the formula to find the length of the short length on a right-angle triangle 	<ul style="list-style-type: none"> To discover and recognize Pythagorean triangles (H) To find the length of the hypotenuse of a right-angle triangle (H) To find the length of the shorter sides of a right-angle triangle (H)
	Working towards	Advancing		
		<ul style="list-style-type: none"> Discover Pythagorean triangles 		
Assessments	<ul style="list-style-type: none"> Check of understanding in class and homework 			

Where will we use these ideas again:

Pythagoras
Trigonometry