

Personalised Learning Checklist

Subject: Maths

Year group: Stage 9



Dear Student,

The list below is the learning you should have completed. Your teacher will use the list to check your progress during this time. It may be used for short quizzes, mini assessments or homework. Where there are gaps your lessons will focus on improving your knowledge and understanding.

Objective	My personal RAG rating (Red- do not understand, Amber- some understanding, Green- I am confident)			Teacher RAG rating
	RED	AMBER	GREEN	
• Understand the meaning of an identity	RED	AMBER	GREEN	
• Multiply two linear expressions of the form $(x + a)(x + b)$	RED	AMBER	GREEN	
• Multiply two linear expressions of the form $(ax + b)(cx + d)$	RED	AMBER	GREEN	
• Expand the expression $(x + a)^2$	RED	AMBER	GREEN	
• Factorise a quadratic expression of the form $x^2 + bx$	RED	AMBER	GREEN	
• Factorise a quadratic expression of the form $x^2 + bx + c$	RED	AMBER	GREEN	
• Work out why two algebraic expressions are equivalent	RED	AMBER	GREEN	
• Create a mathematical argument to show that two algebraic expressions are equivalent	RED	AMBER	GREEN	
• Distinguish between situations that can be modelled by an expression or a formula	RED	AMBER	GREEN	
• Create an expression or a formula to describe a situation	RED	AMBER	GREEN	
• Recognise and use the Fibonacci sequence	RED	AMBER	GREEN	
• Generate Fibonacci type sequences	RED	AMBER	GREEN	
• Solve problems involving Fibonacci type sequences	RED	AMBER	GREEN	
• Explore growing patterns and other problems involving quadratic sequences	RED	AMBER	GREEN	
• Generate terms of a quadratic sequence from a written rule	RED	AMBER	GREEN	
• Find the next terms of a quadratic sequence using first and second differences	RED	AMBER	GREEN	
• Generate terms of a quadratic sequence from its nth term	RED	AMBER	GREEN	
• Know the difference between direct and inverse proportion	RED	AMBER	GREEN	
• Know the features of graphs that represent a direct or inverse proportion situation	RED	AMBER	GREEN	
• Know the features of expressions, or formulae, that represent a direct or inverse proportion situation	RED	AMBER	GREEN	
• Distinguish between situations involving direct and inverse proportion	RED	AMBER	GREEN	
• Solve simple problems involving inverse proportion	RED	AMBER	GREEN	
• Solve simple problems involving rates of pay	RED	AMBER	GREEN	
• Solve more complex ratio problems involving mixing or concentrations	RED	AMBER	GREEN	
• Solve more complex problems involving unit pricing	RED	AMBER	GREEN	
• Finding missing lengths in similar shapes when information is given as a ratio	RED	AMBER	GREEN	
• Solve problems combining understanding of fractions and ratio	RED	AMBER	GREEN	
• Convert between compound units of density and pressure	RED	AMBER	GREEN	
• Solve simple problems involving density	RED	AMBER	GREEN	

• Solve simple problems involving pressure	RED	AMBER	GREEN	
• Solve problems involving speed	RED	AMBER	GREEN	
• Construct graphs of time series	RED	AMBER	GREEN	
• Interpret graphs of time series	RED	AMBER	GREEN	
• Construct and interpret compound bar charts	RED	AMBER	GREEN	
• Construct and interpret frequency polygons	RED	AMBER	GREEN	
• Construct and interpret stem and leaf diagrams	RED	AMBER	GREEN	
• Interpret a scatter diagram using understanding of correlation	RED	AMBER	GREEN	
• Construct a line of best fit on a scatter diagram and use the line of best fit to estimate values	RED	AMBER	GREEN	
• Understand that correlation does not indicate causation	RED	AMBER	GREEN	