

# Year 8 Maths KAT Revision Guide

## How to access independent learning?

The screenshot shows a sidebar on the left with the following items: 'Compulsory' (None available), 'XP Boost' (None available), 'Target' (None available), 'Sparx Practice' (highlighted with a dark blue arrow), and 'Independent Learning' (circled in red). The main area has a blue background with a message: 'Practice homework is designed to help you learn how to use Sparx. Completing this does not count towards the weekly homework set by your teacher.' Below this is a progress bar for 'Sparx Practice homework' showing 0% completion.

The screenshot shows the 'Find topics' and 'My activity' tabs. Below the tabs is a message: 'Choose to practice any topic from the Sparx library at any difficulty level.' There are three input fields: 'Search for topics:' (circled in red) with a placeholder 'Enter topic name or code', 'Your curriculum:' (circled in green) with a dropdown menu showing 'Key Stage 3', and 'Default level:' (circled in black) with a dropdown menu showing 'Level 2'. Below these fields is a 'Select a topic:' section with two buttons: 'Number' (with icons for division, addition, multiplication, and subtraction) and 'Algebra' (with the symbol  $x^2$ ).

### Search For Topics

- This is where you enter your topic code.

### Your Curriculum

- If the topic code starts with M select KS3
- If the topic code starts with U select GCSE

### Difficulty Level

This should be set automatically but if no questions are available at your level you may need to change this to a higher or lower setting.

### Codes

Green – Key knowledge from Year 8

Black – Knowledge required to be confident

Purple – Knowledge to ensure you excel

Unit	Small Step	Sparx Code
<b>Ratio and Scale</b>	Simplify Ratio	M885
	Ratio in the form 1:n	M543
	Sharing in a Ratio	M525
	Ratio and Fractions	M267
	Direct Proportion	M478 (S)
	Percentage Increase/Decrease	M905 M533
	Circumference of a Circle	M169
<b>Multiplicative Change</b>	Solving Problems with Direct Proportion	M472
	Currency Conversion	U610
	Direct Proportion Graphs	M448 (I)
	Real life Graphs	M771
	Scale Factors	M324
	Scale Drawings	M112
<b>Multiplying and Dividing Fractions</b>	Converting mixed numbers/improper fractions	M601
	Multiplying Fractions by Fractions	M157
	Dividing Fractions	M110
	Multiply and Divide Mixed Numbers	M197, M264
<b>Working in the Cartesian Plane</b>	Reading and Plotting Coordinates	M618
	Plotting Lines parallel to the axes	M797
	Plot Straight Lines	M932
	Equations of Lines	M888
	Real life Graphs	M771
<b>Representing Data</b>	Types of Data	U322
	Draw and Use Scatter Graphs	M769
	Lines of Best Fit	M596
	Read and Interpret Frequency Tables	M899
	Read and Interpret Ungrouped Frequency Tables	M441
	Two-way Tables	M899
<b>Tables and Probability</b>	Probabilities as Fractions	M941
	Construct and Use Sample Spaces	M718
	Venn Diagrams	M829 M419
	Probability from tables	U246
	Product Rule for Repeated Events	M299
<b>Brackets, Equations and Inequalities</b>	Algebraic Notation	M813
	Expand Single Brackets	M237, M792
	Factorise Single Brackets	M100
	Solve Equations with Brackets	M957, M509
	Solve Inequalities	M118
	Solve Inequalities with Unknown on Both Sides	M732
	Expand Double brackets	M960
	Formulae, Expressions, Identities and Equations	M830
<b>Sequences</b>	Patterns	M241 M866
	Sequences from algebraic rules	M166
	Find the nth Term Rule	M991
<b>Indices</b>	Index Rules	M608, M120