



**MVC
Mathematics
Department**

This document outlines the main activities you will complete this year. Use this as a guide to prepare for lessons or check your understanding.

A scheme

Name:

Maths teacher(s):

I will:

- work to the best of my ability, showing all my workings
- complete my homework to a good standard by the deadline set
- show tenacity when solving problems
- always have the correct equipment for all lessons

Signed:

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The MVC Mathematics Department will:

- help you develop fluency in mathematical concepts
- help you develop your mathematical communication and reasoning
- help you develop problem solving skills
- set appropriate homework
- regularly assess your progress
- give you regular feedback and let you know what else you need to do to maintain or increase your progress

Signed:

MVC Maths Department



Online tasks are usually set on www.hegartymaths.com

To access this site you need to enter your name, date of birth and then set your own password. If you have forgotten your password please contact your maths teacher via email.

Every lesson you will need to bring this equipment:

- exercise book
- learning log
- scientific calculator
- black pen × 2
- pencil × 2
- ruler
- eraser
- pencil sharpener
- highlighter
- glue stick

When advised, you will also need to bring:

- protractor
- pair of compasses
- colouring pencils

Optionally:

- colouring pencils

	HW	Objectives Autumn	Hegarty Tasks
ANum1	—	Read and write any numbers up to one million in words and figures, taking care to spell words correctly	
		Recall my times tables up to 12x12	
		Find factors and multiples of numbers	27
		Order numbers with two decimal places and put them on a number line	
		Multiply and divide any number by 10, 100 or 1000	15
		Read and write amounts of money , and do money calculations	743,744
		Read 12 and 24 hour clock times, and tell the time exactly	
		Explain when to add, subtract, multiply or divide to solve a problem	
		Use the symbols =, ≠, <, and >	
AAAlg1	—	Use a formula written in words	
		Use letters to represent numbers I don't know	
		Work out an expression if I'm told what number the letter stands for Eg if a=5, then a+3=8	
		Write algebra in a shorter way , eg a+a+a=3a, a+2b+3a=4a+2b	156
AGeom1	—	Estimate the size of any angle to the nearest 10°	
		Sketch an estimate of an angle to within 10°	
		Use a protractor to accurately draw or measure acute and obtuse angles within 1°	
		Use the fact that angles on a straight line sum to 180° to find missing angles	
		Recognise which nets make cubes and which do not.	
		Make a 3D shape by using its net (Eg: prism or cuboid)	833
		Construct shapes (including nets) using a pencil, ruler and protractor	
AData1	—	Ask questions, plan how to answer them and how to collect the data required	
		Make a tally chart and frequency table	401
		Draw a bar chart and label the axes	
		Draw a bar chart for grouped data	
		Explain what a bar chart shows	

Number	Algebra	Geometry	Data	Revision	Total	
/	/	/	/	/	/	%

	HW	Objectives Spring	Hegarty Tasks
ANum2	—	Work out complements to 100, 1000, 360	
		Recall my times tables up to 12x12	10
		Use tables to do mental division	11
		Add and subtract 2 digit numbers in my head	
		Use a written method to add and subtract 3 digit numbers	18,19
		Use a written method to add and subtract decimals	47
		Multiply a 2 digit number by a 1 digit number eg 14x5	
		Round numbers to the nearest 1, 10 or 100	17
AAlg2	—	Use number machines with two steps	
		Use a number machine backwards	
		Explain what inverse means	177
		Solve equations with letters on only one side	
AGeom2	—	Find an area by counting squares	
		Find the area of an unusual shape by counting squares and estimating	
		Find an area of a rectangle by working out length x width	
		Find the perimeter by measuring sides	
		Find the perimeter when I'm told the lengths of the sides	
		Use the correct units for area and perimeter	
AData2	—	Find the mode	404
		Find the median	409
		Find the range	410
		Describe a set of data using the mode, median and range	
		Compare two sets of data using the range and the median or mode	

Number	Algebra	Geometry	Data	Revision	Total	
/	/	/	/	/	/	%

	HW	Objectives Summer	Hegarty
ANum3	—	Understand that a percentage is a fraction out of 100	81
		Find 10%, 25%, 50% of an amount	
		Say what fraction ($\frac{2}{3}, \frac{3}{5}, \frac{7}{10}$) has been shaded on a diagram	
		Shade in a diagram to show a given fraction	58
		Put simple fractions on a number line	
		Add fractions with the same denominator	65
		Understand ratio . Use the : symbol and use the correct language	
AAIg3	—	Describe patterns in sequences , and how to get the next number	196, 197
		Fill in the gaps in a sequence, both ascending (getting bigger) and descending (getting smaller)	
		Recognise sequences of odd numbers, even numbers, and times tables	
		Make and draw sequence patterns	
		Plot coordinates including negatives	199
		Draw and label axes correctly	
AGeom3	—	Draw all the lines of symmetry on a regular polygon	827
		Draw all the lines of symmetry on other shapes	
		Complete a shape with a horizontal or vertical or diagonal mirror line	
		Explain and use the words axis , object , image	
		Recognise the order of rotational symmetry of a shape	828
		Identify and describe all the properties of isosceles, equilateral and scalene triangles	
		Identify and describe all the properties of special quadrilaterals (square, rectangle, parallelogram, trapezium, kite, rhombus and arrow-head)	825
AData3	—	Put events onto a probability scale labelled impossible, unlikely, equally likely, likely, certain	
		Use the spaces in between the words to place events	349
		Understand evens or 50-50	

Number	Algebra	Geometry	Data	Revision	Total	
/	/	/	/	/	/	%