## **Maths Teaching Cycle**

The maths curriculum at Wardley CE Primary is based upon the National Curriculum and the way that this is delivered through the Maths No Problem scheme. The half-termly cycle is a rough guide as the amount of time given to a lesson will be based upon the time needed to ensure the children have mastered the content before moving on. The two fixed points are to have covered the concepts by the mid-year and the end of year.

MILESTONE ONE						
Y1	AUTUMN TERM 1	AUTUMN TERM 2	SPRING TERM 1	SPRING TERM 2	SUMMER TERM 1	SUMMER TERM 2
Y1	Number Bonds to 10 (8 lessons) Number Bonds (3 lessons) Addition Within 10 (6 lessons) Subtraction Within 10 (7 lessons)	Positions (4 lessons) Numbers to 20 (6 lessons) Addition & Subtraction Within 20 (8 lessons)	Shapes & Patterns (5 lessons) Length & Height (5 lessons) Mid Year Revision	Numbers to 40 (11 lessons) Add & Subtraction Word Problems (7 lessons) Multiplication (6 lessons)	Fractions (4 lessons) Numbers to 100 (5 lessons) Time (7 lessons) Money (3 lessons)	Volume & Capacity (4 lessons) Mass (3 lessons) Space (4 lessons) End of Year Revision
Y2	Numbers to 100 (6 lessons) Addition & Subtraction (13 lessons) Multiplication of 2, 5 & 10 (10 lessons)	Multiplication & Division of 2, 5 & 10 (8 lessons) Length (9 lessons) Mass (8 lessons)	Temperature (3 lessons) Picture Graphs (6 lessons) Mid Year Revision	Word Problems (5 lessons) Money (11 lessons) 2D Shape (10 lessons)	3D Shape (7 lessons) Fractions (16 lessons)	Time (12 lessons) Volume (7 lessons) End of Year Revision
Y4	Numbers to 1000 (8 lessons) Addition & Subtraction (23 lessons)	Multiplication & Division (15 lessons) Further Multiplication & Division (11 lessons)	Length (10 lessons) Mass (7 lessons) Volume (10 lessons) Mid Year Revision	Money (14 lessons) Time (21 lessons)	Fractions (30 lessons) Angles (7 lessons)	Line & shapes (9 lessons) Perimeter (10 lessons) End of Year Revision
Y5	Numbers to 10000 (14 lessons) Addition & Subtraction Within 10000 (17 lessons)	Multiplication & Division (18 lessons) Further Multiplication & Division (18 lessons)	Graphs (5 lessons) Fractions (13 lessons) Time (6 lessons) Mid Year Revision			

MILESTONE TWO						
	AUTUMN TERM 1	AUTUMN TERM 2	SPRING TERM 1	SPRING TERM 2	SUMMER TERM 1	SUMMER TERM 2
Y3	Numbers to 1000 (8 lessons) Addition & Subtraction (23 lessons)	Multiplication & Division (15 lessons) Further Multiplication & Division (11 lessons)	Length (10 lessons) Mass (7 lessons) Volume (10 lessons) Mid Year Revision	Money (14 lessons) Time (21 lessons)	Fractions (30 lessons) Angles (7 lessons)	Line & shapes (9 lessons) Perimeter (10 lessons) End of Year Revision

Y4	Numbers to 10000 (14 lessons) Addition & Subtraction Within 10000 (17 lessons)	Multiplication & Division (18 lessons) Further Multiplication & Division (18 lessons)	Graphs (5 lessons) Fractions (13 lessons) Time (6 lessons) Mid Year Revision		

KEY SKILLS IN COMPUTING ACROSS KS1 & KS2						
	Y1 & Y2	Y3 & Y4	Y5 & Y6			
∽ - ¹ Motion						

Control motion by specifying the number of steps to travel, direction and turn.	Use specified screen coordinates to control movement.	Set IF conditions for movements. Specify types of rotation giving the number of degrees.	
Looks			
Add text strings, show and hide objects and change the features of an object.	Set the appearance of objects and create sequences of changes.	Change the position of objects between screen layers (send to back, bring to front).	
Sound	T		
Select sounds and control when they are heard, their duration and volume.	<ul> <li>Create and edit sounds.</li> <li>Control when they are heard,</li> <li>their volume, duration and</li> <li>rests.</li> </ul>	<ul> <li>Upload sounds from a file and edit them. Add effects such as fade in and out and control their implementation.</li> </ul>	
Draw			
Control when drawings appear and set the pen colour, size and shape.	Control the shade of pens.	Combine the use of pens with movement to create interesting effects.	
Events			
Specify user inputs (such as clicks) to control events.	Specify conditions to trigger events.	Set events to control other events by 'broadcasting' information as a trigger.	
Control			
Specify the nature of events (such as a single event or a loop).	Use IF THEN conditions to control events or objects.	Use IF THEN ELSE conditions to control events or objects.	
Sensing		,	
Create conditions for actions by	Create conditions for actions	Use a range of sensing tools	
waiting for a user input (such as	by sensing proximity or by	(including proximity, user inputs,	
responses to questions like: What is your name?).	waiting for a user input (such as proximity to a specified colour or a line or responses to	loudness and mouse position) to control events or actions.	
	questions).		
Variables and lists			
• From Year 3 onwards.	<ul> <li>Use variables to store a value.</li> <li>Use the functions define, set, change, show and hide to control the variables.</li> </ul>	Use lists to create a set of variables.	
Operators			
• From Year 3 onwards.	• Use the Reporter operators () + () () - () () * () () / () to perform calculations.	• Use the Boolean operators () < () () = () () > () ()and() ()or() Not() to define conditions. • Use the Reporter operators () + () () - () () * () () / () to perform calculations. Pick Random () to () Join () () Letter () of () Length of () () Mod () This reports the remainder	

To connect	<ul> <li>Participate in class social media accounts.</li> <li>Understand online risks and the age rules for sites.</li> </ul>	Contribute to blogs that are moderated by teachers. Give examples of the risks posed by online communications. Understand the term 'copyright'. Understand that comments made online that are hurtful or offensive are the same as bullying. Understand how online services work.	Collaborate with others online on sites approved and moderated by teachers. Give examples of the risks of online communities and demonstrate knowledge of how to minimise risk and report problems. Understand and demonstrate knowledge that it is illegal to download copyrighted material, including music or games, without express written permission, from the copyright holder. Understand the effect of online comments and show responsibility and sensitivity when online. Understand how simple networks are set up and used.
To communicate	Use a range of applications and devices in order to communicate ideas, work and messages.	Use some of the advanced features of applications and devices in order to communicate ideas, work or messages professionally.	<ul> <li>Choose the most suitable applications and devices for the purposes of communication.</li> <li>Use many of the advanced features in order to create high quality, professional or efficient communications.</li> </ul>
To collect	Use simple databases to record information in areas across the curriculum.	Devise and construct databases using applications designed for this purpose in areas across the curriculum.	Select appropriate applications to devise, construct and manipulate data and present it in an effective and professional manner.