ST AMBROSE
CATHOLIC PRIMARY
SCHOOL

COMPUTING COVERAGE: NATIONAL CURRICLUM YEAR 1		
Online Safety & Exploring Purple Mash	**Coding**	**Spreadsheets**
• To login safely. • To introduce ownership of electronic files and child's own work. • Locate saved work and respond to online teacher comments. • To effectively use search functions when looking for something. • Adding pictures and text to work • To use the print, save, open and new functions within Purple Mash. • To explore the games section of Purple Mash. • To understand the importance of logging out when finished.	• Understand what coding means in computing. • Create unambiguous instructions like those required by a computer. • To use the 2Code program to create a simple program. • To use Design Mode to add and change backgrounds and characters. They will use the Properties table to change the look of the objects. • To use the Properties table to change the look of the objects. • To design a scene for a program. • To use code blocks to make the characters move automatically when the green Play button is clicked. • To use the Stop button to make characters stop when the background is clicked. • To explore a method to code interactivity between objects. • To use Collision Detection to make objects perform actions. • To use the sound property.	• To navigate around a spreadsheet • Explain what rows and columns are. • Enter data into cells • To save and open sheets • Adding images to a spreadsheet and using the image toolbox • Using the 'speak' and 'count' tools in 2Calculate to count items

COMPUTING COVERAGE: NATIONAL CURRICLUM YEAR 2			
Online Safety	**Making Music**	**Effective Searching**	**Coding**
• To know how to refine searches using the Search tool. • To know how to share work electronically using the display boards. • To use digital technology to share work on Purple Mash to communicate and connect with others locally. • To have some knowledge and understanding about sharing more globally on the Internet. • To introduce Email as a communication tool using 2Respond simulations. • To understand how we talk to others when they aren't there in front of us. • To open and send simple online communications in the form of email. • To understand that information put online leaves a digital footprint or trail. • To begin to think critically about the information they leave online. • To identify the steps that can be taken to keep personal data and hardware secure.	• To be introduced to making music digitally using 2Sequence. • To explore, edit and combine sounds using 2Sequence. • To add sounds to a tune they've already created to change it. • To think about how music can be used to express feelings and create tunes which depict feelings. • To upload a sound from a bank of sounds into the Sounds section. • To record their own sound and upload it into the Sounds section. • To create their own tune using the sounds which they have added to the Sounds section.	• To understand the terminology associated with searching. • To gain a better understanding about searching on the Internet. • To create a leaflet to help someone search for information on the Internet.	• To understand what an algorithm is. • To create a computer program using simple algorithms. • To compare the Turtle and Character objects. • To use the button object. • To understand how use the Repeat command. • To understand how to use the Timer command. • To know what debugging means. • To understand the need to test and debug a program repeatedly. • To debug simple programs. • To create programs using different kinds of objects whose behaviours are limited to specific actions. • To predict what the objects will do in other programs, based on their knowledge of what the object is capable of. • To discuss how logic helped them understand that they could only predict specific actions, as that is what the objects were limited to. • To use all the coding knowledge, they have learned throughout their programming lessons to create a more complex program that tells a story.

COMPUTING COVERAGE: NATIONAL CURRICLUM YEAR 3			
Online Safety	**Spreadsheets**	**Touch Typing**	**Presenting With Microsoft**
- To know what makes a safe password, how to keep passwords safe and the consequences of giving your passwords away. - To understand how the Internet can be used to help us to communicate effectively. - To understand how a blog can be used to help us communicate with a wider audience. - For children to consider if that they read on websites is true? - To look at some 'spoof' websites. - To create a 'spoof' webpage. - To think about why these sites might exist and how to check that the information is accurate. - To learn about the meaning of age restrictions symbols on digital media and devices. - To discuss why PEGI restrictions exist. - To know where to turn for help if they see inappropriate content or have inappropriate contact from others.	- To create pie charts and bar graphs. - To use the 'more than', 'less than' and 'equals' tools. - To introduce the Advanced Mode of 2Calculate and use coordinates.	- To introduce typing terminology. Understand the correct way to sit at the keyboard. - To learn how to use the home, top and bottom row keys. - To practise and improve typing for home, bottom and top rows. - To practise the keys typed with the left hand - To practise the keys typed with the right hand.	- To create a page in a presentation. - To add media to a presentation - To add animations into a presentation - To add timings to a presentation - To use the skills learnt in previous weeks to design and present an effective presentation

COMPUTING COVERAGE: NATIONAL CURRICLUM YEAR 4		
Online Safety	**Coding**	**Effective Search**
• To understand how children can protect themselves from online identity theft. • Understand that information put online leaves a digital footprint or trail and that this can aid identity theft. • To identify the risks and benefits of installing software including apps. • To understand that copying the work of others and presenting it as their own is called 'plagiarism' and to consider the consequences of plagiarism. • To identify appropriate behaviour when participating or contributing to collaborative online projects for learning. • To identify the positive and negative influences of technology on health and the environment. • To understand the importance of balancing game and screen time with other parts of their lives.	• To review coding vocabulary. • To use a sketch or storyboard to represent a program design and algorithm. • To use the design to create a program. • To introduce the If/else statement and use it in a program. • To create a variable. • To explore a flowchart design for a program with an if/else statement • To create a program which responds to the If/else command, using the value of the variable. • To create a program with a character that repeats actions. • To use the 'Repeat Until' command to make characters repeat actions. • To program a character to respond to user keyboard input. • To make timers and counting machines using variables to print a new number to the screen every second. • To explore how 2Code can be used to investigate control by creating a simulation. • To know what decomposition and abstraction are in computer science • To take a real-life situation, decompose it and think about the level of abstraction. • To design a decomposed feature of a real-life situation.	• To locate information on the search results page. • To use search effectively to find out information. • To assess whether an information source is true and reliable.

COMPUTING COVERAGE: NATIONAL CURRICLUM YEAR 5		
Online Safety	**Coding**	**Spreadsheets**
• To gain a greater understanding of the impact that sharing digital content can have. • To review sources of support when using technology. • To review children's responsibility to one another in their online behaviour. • To know how to maintain secure passwords. • To understand the advantages, disadvantages, permissions and purposes of altering an image digitally and the reasons for this. • To be aware of appropriate and inappropriate text, photographs and videos and the impact of sharing these online. • To learn about how to reference sources in their work • To search the Internet with a consideration for the reliability of the results of sources to check validity and understand the impact of incorrect information. • Ensuring reliability through using different methods of communication.	• To review coding vocabulary. • To use a sketch or storyboard to represent a program design and algorithm. • To use the design to create a program. • To design and write a program that simulates a physical system. • To review the use of number variables in 2Code. • To explore text variables • To create a playable, competitive game. • To combine the use of variables, If/else statements and Repeats to achieve the desired effect in code. • To read code so that it can be adapted, personalised and improved. • To explore the launch command and use buttons within a program that launch other programs or open websites. • To create a program to inform others.	• Conversions of measurements. • Novel use of the count tool. • Formulae including the advanced mode. • Using text variables to perform calculations. • Using a spreadsheet to plan an event. •

COMPUTING COVERAGE: NATIONAL CURRICLUM YEAR 6			
Online Safety	**Coding**	**Blogging**	**Spreadsheets with Excel**
• Identify benefits and risks of mobile devices broadcasting the location of the user/device, e.g. apps accessing location. • Identify secure sites by looking for privacy seals of approval, e.g. https, padlock icon. • Identify the benefits and risks of giving personal information and device access to different software. • To review the meaning of a digital footprint and understand how and why people use their information and online presence to create a virtual image of themselves as a user. • To have a clear idea of appropriate online behaviour and how this can protect themselves and others from possible online dangers, bullying and inappropriate behaviour. • To begin to understand how information online can persist and give away details of those who share or modify it. • To understand the importance of balancing game and screen time with other parts of their lives, e.g. explore the reasons why they may be tempted to spend more time playing games or find it difficult to stop playing and the effect this has on their health. • To identify the positive and negative influences of technology on health and the environment.	• To review good planning skills. • To design programs using their choice of objects, attributing specific actions to each using their new programming knowledge. • To use variables within a game to keep track of the properties of objects. • To use functions and understand why they are useful in 2Code. • To debug a program and organise the code into tabs. • To organise code into functions and Call functions to eliminate surplus code in the program. • To explore the options for getting text input from the user in 2Code. • How to include interactivity in programming. • To use flowcharts to test and debug a program. • To create a simulation of a room in which devices can be controlled. • To explore how 2Code can be used to make a text-based adventure game.	• To identify the purpose of writing a blog. • To identify the features of successful blog writing. • To plan the theme and content for a blog. • To understand how to write a blog. • To consider the effect upon the audience of changing the visual properties of the blog. • To understand the importance of regularly updating the content of a blog. • To understand how to contribute to an existing blog. • To understand how and why blog posts are approved by the teacher. • To understand the importance of commenting on blogs. • To peer-assess blogs against the agreed success criteria.	• Exploring Probability • Use of spreadsheets in 'real life' Creating a computational model • Use a spreadsheet to plan pocket money spending • Planning a school event