

Computing End Points

YEAR 3

UNIT 3.1 Coding

Children will be able to review previous coding knowledge. They will understand what a flowchart is and how flowcharts are used in computer programming. Children will understand that there are different types of timers and be able to select the right type of timer for a purpose. They will understand how to use the repeat command. Children will use coding knowledge to create a range of programs and understand the importance of nesting. They will design and create an interactive scene.

- I can use a flowchart to create a computer program.
- I can create a computer program that uses click events and timers.
- I can create a program that uses a timer-after and timer-every command.
- I understand there can be different ways to solve a problem.
- I understand how the turtle object moves.
- I can create a computer program that includes use of the repeat command.
- I can run, test and debug my programs.
- I can consider nesting when debugging my programs.
- I can use the properties table to set the properties of objects.
- I can plan my scene and code before I create it.
- I can confidently make different things happen in a program.

UNIT 3.2 Online Safety

Children know what makes a password safe, how to keep them safe and the consequences of giving your passwords away. They understand how the Internet can be used to help us to communicate effectively and how a blog can be used to help us communicate with a wider audience. They will consider if what can be read on websites is always true by looking at a 'spoof' website then creating their own. They will think about why these sites might exist and how to check that the information is accurate. Children will learn about the meaning of age restrictions symbols on digital media and devices and discuss why PEGI restrictions exist. They will know where to turn for help if they see inappropriate content or have inappropriate contact from others.

- I understand what makes a good password and begin to realise the outcomes of not keeping them safe.
- I can contribute to ways that the Internet can help us to communicate and have contributed to a class blog.
- I understand that some information held on websites may not be accurate or true and are beginning to understand how to search the Internet, thinking critically about the results returned.
- I have accessed and assessed a 'spoof' website and created my own 'spoof' webpage mock-up.
- I can identify some physical and emotional effects of playing/watching inappropriate content/games.
- I relate cyberbullying to bullying in the real-world and have strategies for dealing with online bullying including screenshot and reporting.

UNIT 3.3 Spreadsheets

Children will be able to add and edit data in a table layout and find out how spreadsheet programs can automatically create graphs from data. They will begin to use the 'more than', 'less than' and 'equals' tools, as well as the 'spin' tool and show how it can be used to count through times tables. Children will be introduced to the Advanced mode of 2Calculate and learn about describing cells using their addresses.

- I can create a table of data on a spreadsheet.
- I can use a spreadsheet program to automatically create charts and graphs from data.
- I can use the 'more than', 'less than' and 'equals' tools to compare different numbers and work out solutions to calculations.
- I can use the 'spin' tool to count through times tables.
- I can describe a cell location in a spreadsheet using the notation of a letter for the column followed by a number for the row.



Computing End Points

UNIT 3.4 Touch Typing

Children will learn typing terminology and understand the correct way to sit at the keyboard. They will learn how to use the home, top and bottom row keys, then practice and improve typing for these. They will complete individual practices of the keys typed with the left and right hand.

- I understand the names of the fingers.
- I understand what is meant by the home, bottom, and top rows.
- I have developed the ability to touch type the home, bottom, and top rows.
- I can use two hands to type the letters on the keyboard.
- I can touch type using my left hand.
- I can touch type using my right hand.

Unit 3.5 Email

Children will think about the different methods of communication and look closely at emails. They will open and respond to an email and write an email to someone from an address book, including the use of attachments. Children will learn how to use email safely and explore a simulated email scenario.

- method.

 I can open an email and respond to it.
- I have written rules about how to stay safe using email.

• I can list a range of different ways to communicate and

highlight the strengths and weaknesses of each

- I can read and respond to a series of email communications.
- I can attach files appropriately and use email communication to explore ideas.
- I know why the terms CC and BCC are used and understand when to use them.

Unit 3.6 Branching Databases

Children will sort objects using just YES/NO questions. They will complete a branching database using 2Question and create a branching database of their own choice.

- I understand how YES/NO questions are structured and answered.
- I can explain why they choose a particular question to split my database.
- I have completed a branching database about vegetables.
- I can edit and adapt a branching database to accommodate new entries.
- I can choose a suitable topic for a branching database.
- I can select and save appropriate images and use these to create a branching database.
- I know how to use and debug my own and others' branching database.

Unit 3.7 Simulations

Children will find out what a simulation is and understand the purpose of simulations. They will explore a simulation, making choices and discussing their effects. They will work through and evaluate a more complex simulation.

- I know that a computer simulation can represent real and imaginary situations and can give some examples of simulations used for fun/work
- I can use a simulation to try out different options and to test predictions.
- I can begin to evaluate simulations by comparing them with real situations and considering their usefulness.
- I can identify the relationships and rules on which the simulations are based.
- I can evaluate a simulation to determine its usefulness for purpose.
- I can create my own [simple] simulation.



Computing End Points

Unit 3.8 Graphing	Children will enter data into a graph and answer questions. They will be able to solve an investigation and present the results in graphic form.	 I can set up a graph with a given number of fields and enter data. I will have solved a maths investigation. I can present the results in a range of graphical formats. I will use the sorting option to make analysis of their data easier.
Unit 3.9 Presenting using PowerPoint	Children will create a page in a presentation and add media to it. They will also be able to add animations, timings, etc and use the skills learnt in to design and present an effective presentation	 I can add text to a page and format it. I can change the design of the slides. I can insert a new slide. I can insert and edit pictures. I can use animations and transition in a presentation. I can add timings to a presentation. I can present effectively using PowerPoint.