

Computing Skills & knowledge in Year 3

National Curriculum Objectives: In this unit, children will be taught to:

Email		Route Planners	
Skills	Knowledge	Skills	Knowledge
- Explain the advantages and disadvantages of different communication methods. - Choose an appropriate communication method for a task. - Make use of 2Email to communicate within school. - Recognise the differences between digital and non-digital communication methods. - Explain different digital communication methods such as instant messaging, email and video calls. - Identify the advantages of instant communication. - Explain the differences between email and traditional communication methods which are not instant. - Identify the common features of the email screen. - Make use of these common features of email software to communicate digitally. - Check alerts for new messages and respond to these. - Use the address book within 2Email to find contacts. - Send emails to multiple contacts using the address book. - Identify the attachment icon. - Select files to attach to an email and send. - Be cautious of emails that have attachments. - Discuss the advantages and disadvantages of being able to send attachments with emails. - Recognise a concerning email/contact.	- There are different methods of communication and they each have strengths and weaknesses. - Emails are a form of digital communication. - Emails can be sent and received almost instantly to anyone with an email address. - Common features of email software are the inbox, the 'To' address field, the sender email address, the subject, the message text, and the compose and reply functions. - Alerts can be used to notify a person that they have unread email. - Address books can be saved in the email software. This provides a convenient way to send emails without typing the full email address each time. - Pictures, documents and other file types can be attached to emails - There are risks related to use of email.	- Input commands in 2Go. - Input purposeful commands in 2Go to make the turtle move in a particular direction towards a goal. - Input commands that rotate the turtle to face the desired direction for movement using both 90° and 45° angles. - Plan the route by first writing the algorithm and then inputting the code commands. - Use techniques such as finger movements to plan a route. - Input several commands into a sequential algorithm layout and run this code to move the turtle along the programmed route. - Reset the turtle to the starting position to re-run the code. - Use the repeat algorithm layout for 2Go commands. - Anticipate the effect of the repeat and use logical reasoning to decide upon when this layout is useful to accomplish a task. - Make logical attempts to debug code for routes. • Reset, debug and re-run the code to test routes	- The combination of a direction and a distance is known as a command in 2Go. - Commands can be input into 2Go to control the movement of a screen turtle in four directions. - The turtle can be set to rotate by angles of 90° or 45° both clockwise and anticlockwise. - Planning a route is important to ensure the correct commands are input. - A list of instructions for a route is called an algorithm. - Routes can be programmed to perform more than one command in a sequence. - Routes can be programmed to repeat a sequence of commands a set number of times. - Errors (bugs) occur because commands may have been input incorrectly. - Fixing the errors is called debugging.

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- Identify who a trusted contact is. - Report any concern to a trusted adult and use the report to teacher feature in 2Email. - Consider consent when sharing content digitally. - Recognise personal and private information and know what is not appropriate to share with a recipient.			
Branching Databases		Spreadsheets	
Skills	Knowledge	Skills	Knowledge
- Explain what a database is. - Provide examples of common uses of a database such as the school's attendance database. - Explain the differences between a binary question and an open question. - Identify binary questions that could be used to sort items. - Sort items according to whether the answer the question is yes or no. - Choose binary questions that split a group of objects into half. - Use a binary database in 2Question to identify items. - Work through all routes of a branching database to test whether it works as intended. - Identify and fix bugs in a database. - Add records to a 2Question database then sort the records using binary questioning to create the database.	- A database is a collection of data organised in a way that it can be searched, and information found easily. - A binary question is one that can be answered with 'yes' or 'no'. - Branching databases are structured using binary choices. - A good binary question splits a group roughly in half, half with the answer yes, half with the answer no. - When using a binary database, the questions eliminate data until just one record is left, the item can then be identified. - Branching databases can be created using programs such as 2Question. - It is important to test and debug when creating branching databases so that it works as intended.		
Coding		Presentations - Microsoft	
Skills	Knowledge	Skills	Knowledge
Skills	Knowledge		

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Touch Typing			
Skills	Knowledge		
• Use basic touch-typing skills to become quicker and more efficient with typing. • Check that posture is correct when typing. • Position equipment correctly so that eyes are level with the monitor. • Place feet on the floor. • Position wrists so that they are not touching anything when typing. • Use a range of different keyboards to type letters, numbers, punctuation and symbols. • Use the left hand to type letters. • Use the right hand to type letters. • Locate the ridges on keys F and J to find where the index fingers should rest on the keys. • Position the left and right hands correctly. • Build up to combining left and right-hand use to type words. • Locate the home, top and bottom keys. • Open activities in 2Type referencing the keyboard guide to support recognition of using the correct key when typing letters. • Type numbers using the correct hand and fingers. • Use the shift key by pressing the key on either side of the keyboard with their little finger. • Press the space bar efficiently to form spaces between words.	• Typing is the action or skill of writing something by means of a keyboard (physical or virtual). • It is important to have a good posture when typing to ensure their bodies remain comfortable and don't get sore. • A keyboard is a device with a set of keys (buttons) that you press to type letters, numbers, punctuation and symbols into a computer. It can come in different shapes and sizes. • To be efficient at typing, hands should be positioned correctly on a keyboard and the left and right hands should work independently of each other. • Home, top and bottom row keys are areas on a keyboard where specific keys are located. • Numbers are located on the Number Row at the top of the keyboard. • The shift key is used alongside another key to type capital letters and different punctuation marks and symbols. • The space bar is pressed with the thumb and types a space between letters.	•	•