Year 3

Computing Curriculum

SCHOOL READY, WORK READY, LIFE READY

Year 3 Computing Overview

Term	
Spring 1	**Spring 2**
Unit 3:3 – Spreadsheets Unit 3:4 – Touch Typing	Unit 3:5 - Email

Progression of Knowledge, Skills and Understanding

Creating programs, develop programs and reasoning	Networks	Search engines	Using programs	Safe use
Pupils should be taught to design, write and debug programs that accomplish specific goals, including controlling or stimulating physical systems; solve problems by decomposing them into smaller parts. Pupils should be taught to use sequence, selection, and repetition in programs; work with variables and various forms of input and output. Pupils should be taught to use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.	Pupils should be taught to understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities for communication and collaboration.	Pupils should be taught to use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content.	Pupils should be taught to select use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information.	Pupils should be taught to use technology safely and respectfully and responsibly; recognise acceptable / unacceptable behaviour, identify a range of ways to report concerns about content and contact. keeping person

Spring 1	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7
Purple Mash unit	recap Online safety Unit 3:3 Spreadsheets	Unit 3:3 Spreadsheets	Unit 3:3 Spreadsheets	Unit 3:4 Touch Typing	Unit 3:4 Touch Typing	Unit 3:4 Touch Typing	Unit 3:4 Touch Typing
Objective	To add and edit data in a table layout. To find out ow spreadsheets programs can automatically create graphs from data.	To introduce the 'more than', 'less than' and 'equals' tools. To introduce the 'spin' tool and show how it can be used to count through times tables.	To introduce the Advanced mode of 2Calculate. To learn about describing cells using their addresses.	To introduce typing terminology. To understand the correct way to sit at the keyboard. To learn how to use the home, top and bottom arrow keys.	To practice and improve typing for home, bottom, and top rows.	To practice the keys typed with the left hand.	To practice the keys typed with the right hand.
Prior Learning	Unit 2.3 - Spreadsheets Children can explain what rows and columns are in a spreadsheet. Children can open, save and edit a spreadsheet. Children can add images and allocate them a value. Children can add the count tool to count items. Children can use copying, cutting and pasting to help make spreadsheets. Children can use tools in a spreadsheet to automatically total rows and columns. Children can use a spreadsheet to solve a mathematical puzzle. Children can use images in a spreadsheet. Children can work out how much they need to pay by using a spreadsheet to calculate. Children can create a table of data on a spreadsheet. Children can use the data to create a block graph manually.						
Outcomes	Unit 3:3- Spreadsheets Children can create a table of data on a spreadsheet. Children can use a spreadsheet program to automatically create charts and graphs from data. Children can use the 'more than', 'less than' and 'equals' tools. Children can use the 'spin' tool to count through times tables. Children can describe a cell location in a spreadsheet using notation of a letter for the column followed by a number for the row. Children can find specified locations in a spreadsheet. Unit 3:4- Touch Typing Children understand the names of the fingers. Children understand what is meant by the home, bottom and top row keys.						

	Children have developed the ability to touch type the home, bottom and top rows. Children can use two hands to type letters on the keyboard. Children can touch type using their left hand. Children can touch type using their right hand.						
Assessment Opportunities	Children can create a table of data on a spreadsheet. Children will be able to select the most suitable type of chart to use for their data.	Children can create their own number lines within 2Calculate including 'more than', 'less than' and 'equals' tools.	Children can collect and enter data within 2Calculate. They are able to use the graphing tool to create suitable graphical representations of the data they have within a table.	Children have developed their touch-typing skills and understand how to touch type using the home, bottom and top row keys using both hands. Children can apply these skills to all units.	Children have developed their touch-typing skills and understand how to touch type using the home, bottom and top row keys using both hands. Children can apply these skills to all units.	Children have developed their touch-typing skills and understand how to touch type using the home, bottom and top row keys using both hands. Children can apply these skills to all units.	Children have developed their touch-typing skills and understand how to touch type using the home, bottom and top row keys using both hands. Children can apply these skills to all units.

Knowledge Mat – Spreadsheets

Subject Specific Vocabulary				Sticky Knowledge
Advanced mode	A mode in 2claulcte in which the cells have references and can include formulae.	**Move cell tool**	This tool makes a cell's contents moveable by drag-and-drop methods.	To use 2Calculate to collect data and produce a variety of graphs.
Count tools	In 2Calculate, this counts the number of cells with a value that matches the value of the cell to the left of the tool.	**Rows**	Vertical reference points for the cells in a spreadsheet.	To learn how to copy and paste in 2Calulate
< > =	Symbols used to represent comparing of 2 values.	**Speak tool**	This tool will speak the contents of a cell containing a number each time the value changes.	To use the advanced mode of 2calculate to learn about cell references.
Columns	Vertical reference points for the cells in a spreadsheet.	**Spin tool**	Clicking on this in a cell will increase or decrease the value in the cell by the right by 1.	To use the symbols more than, less than, and equals to, to compare values.
Cells	An individual section of a spreadsheet grid. It contains data or calculations.	**Equals tool**	Tests whether the entered calculation in the cells to the left of the tool has the correct answer in the cell to the right of the tool.	To use the 2Calculate equals tool to check calculations.
Spreadsheet	A computer program that represents information in a grid or rows and columns.	**Copy and paste**	A way to copy information from the screen into the computer's memory and paste it elsewhere without re-typing.	
Delete key	Use this key to remove the contents of the cell.	**Key Questions**		
Image toolbox	Use this to insert images into cells.	Explain how you would collect data to find out about children's favourite subject at school? Label one column 'subject' and list the other subjects in this column. In the cells to the right put in the number of children who like tis subject. Use the chart button to automatically create a chart. A pie chart would be a suitable choice.		
Lock tool	This tool prevents cell values being changed.	How can you make a 3 times table machine using the 'spin tool' ? Put the spin tool in the left most cell of a row. Type 0x3 in the next 3 cells. Put an equals tool in the next cell in the row. When you spin the spin tool, the question will change. Enter the answer and the equals tool will tell you if it is correct.		
		Explain how you would locate a cell in the advanced mode? Cells in advanced mode have rows labelled with numbers, and columns labelled with letters. So, each cell has a number and letter. For example, A1 or D7.		

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Knowledge Mat – Touch Typing

Subject Specific Vocabulary		Sticky Knowledge
Posture	The correct way to sit at a computer	To introduce typing terminology
Top row keys	The keys on the top row of the keyboard	To understand the correct way to sit at the keyboard.
Space bar	The bar at the bottom of the keyboard	To understand how to use the home, top and bottom row keys.
Home row keys	The keys on the middle row of the keyboard	To practice typing using the left and right hand.
Bottom row keys	The keys on the bottom row of the keyboard	

Key Questions	
Why is it important to have a good posture at the computer ? A good posture is important to help you avoid any injuries from repeatedly working at the computer incorrectly.	Why should I type certain keys with certain fingers? Using specific keys with specific fingers allows you to type quickly.

Spring 2	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	
Purple Mash unit	Unit 3:5 Email	Unit 3:5 Email	Unit 3:5 Email	Unit 3:5 Email	Unit 3:5 Email	Unit 3:5 Email	
Objective	To think about the different methods of communication.	To open and respond to an email. To write an email to someone from an address book.	To learn how to use email safely.	To learn how to use email safely.	To add and attachment to an email.	To explore a simulated email scenario.	
Prior Learning	Unit 2:2 – Online safety. Children can use the search facility to refine searches on Purple Mash by year group and subject. Children can share the work they have created to a display board. Children understand that the teacher approves work before it is displayed. Children are beginning to understand how things can be shared electronically for others to see both on Purple Mash and the internet. Pupil know that Email is a form of digital communication. Children can open and send an email to a 2Repond character. Children can explain what a digital footprint is. Unit 2:5 -Effective Searching Children can recall the meaning of key Internet and searching items. Children have successfully completed a quiz about the Internet. Children can identify the basic parts of a web search engine search page. Children learnt to read a web search results page. Children can search the Internet for answers to a quiz. Children have created a leaflet to consolidate knowledge of effective internet searching.						
Outcomes	Unit 3:5 - Email Children can list a range of different ways to communicate. Children can use 2Connect to highlight the strengths and weaknesses of each method. Children can open an email and respond to it. Children have sent emails to other children in the class / school. Children have written rules about how to stay safe using email. Children have contributed to classmates' rules. Children understand the importance of draft. Children have created a quiz about email safety which explores scenarios that they could come across in the future. Children can attach work to an email. Children know what CC means and how to use it. Children can read and respond to a series of email communications.						

	Children can attach files appropriately and use email communication to explore ideas. Children know why the terms CC and BCC are used. Children understand when to use CC and BCC.						
Assessment Opportunities	Children can list a range of ways the internet can be used to provide different methods of communication.	Children will be able to exchange email communications using 2Email. Children will be able to select a person from an address book.	Children will be able to exchange email communications using 2Email. Children understand the importance of staying safe.	Children will be able to exchange email communications using 2Email. Children understand the importance of staying safe.	Children will be able to exchange email communications using 2Email. Children understand the importance of staying safe.	Children will be able to exchange email communications using 2Email. Children understand the importance of staying safe.	

Knowledge Mat – Email

Subject Specific Vocabulary				Sticky Knowledge
Communication	The sharing or exchanging information by speaking, writing or using such other medium like email.	**Compose**	To write or create something.	To think about different methods of communication.
Email	Messages sent by electronic means from device to one or more people	**Send**	To make an email be delivered to the email address it is addressed to.	To open and respond to an email using an address book.
Report to the teacher	A way in 2Email to tell the teacher if you have received an email that makes you fell upset or scared.	**Attachment**	A file, which could be a piece of work or a picture, that is sent with the email.	To learn how to email safely.
Address book	A list of people who you regularly send an email to.	**Save to draft**	Allows you to save an email that you are working on and send it later.	To add an attachment to an email.
Password	A secret word, phrase or combination of letters, numbers and symbols that must be used to gain admission to a site or application such as email.	**CC**	A way of sending a copy of your email to other people so that they can see the information in it.	To explore a simulated email scenario.
Formatting	Allows you to change the way the text of an email looks. Foe example, you can make the text bold or underline it.			

Key Questions
What is email ? Email is a method od sending electronic communication from one device to another.
What should I do if I receive an email that makes me upset or scared ? If you are at school, you should tell the teacher immediately. If you receive the message at home, then you tell your parent or guardian.
What information can I send in an email ? As well as sending a message, files such as photographs, videos, music and other resources can be attached to the email and sent to the receiver.

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