

Computing:

Y5 spring term

National Curriculum subject content:

- ✓ Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts.
- ✓ 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.

National Curriculum theme:

- ✓ Computer Science
- ✓ Information Technology



Key Vocabulary: Spreadsheets

Rows	Boxes running horizontally in a spreadsheet.
Spreadsheet	A computer program that represents data in cells in a grid of rows and columns. Any cell in the grid may contain either data or a formula that describes the value to be inserted based on the values in other cells.
Columns	Boxes running vertically in a spreadsheet.
Data	A collection of information, especially facts or numbers, obtained by observation, questions or measurement to be analysed and used to help decision-making.
Format	The way that text looks. Formatting cells is helpful for interpreting a cell's contents for example you might want to format a cell to show a fraction.
Formula	A group of letters, numbers, or other symbols which represents a scientific or mathematical rule. The plural of formula is formulae.
Advance mode	A mode of 2Calculate in which the cells have references and can include formulae.
Formula Wizard	The wizard guides you in creating a variety of formulae for a cell such as calculations, totals, averages, minimum and maximum for the selected cells.
'How Many?' Tool	Counts how many of a variable there are in a spreadsheet.
Variable	Used in computing to keep track of things that can change while a program is running.
Formula Bar	An area of the spreadsheet into which formulae can be entered using the '=' sign to open the formula.
Totalling tool	Adds up the value of every cell above it, next to it or diagonal to it according to which total tool is selected.

Key Vocabulary: Game Creator

Evaluation	To critically examine a program. It involves collecting and analysing information about a program's activities, characteristics, and outcomes.
Feedback	Share information with the creator about how the game could be improved.
Image	A picture displayed on the computer screen.
Instructions	Detailed information about how something should be done or operated.
Promotion	The publicising of a product, in this case a game, so as to increase sales or public awareness.
Screenshot	An image of the data displayed on the screen of a computer or mobile device.
Quest	To find or do something.
Texture	High frequency detail or colour information on a computer generated graphic.
Theme	The subject of the game.

Sequence of Learning:

Objectives (key knowledge):

Purple Mash Unit 5.3 Spreadsheets (5 lessons)

Unit 5.5 Game Creator (5 lessons)

Purple Mash Unit 5.3 Spreadsheets (5 lessons)					Unit 5.5 Game Creator (5 lessons)				
Conversions of Measurements Objective 1: To use formulae within a spreadsheet to convert measurements of length and distance.	The Count Too Objective 2: To use the count tool to answer hypotheses about common letters in use.	Formulae Including the Advanced Mode Objective 3: To use a spreadsheet to model a real-life problem. To use formulae to calculate area and perimeter of shapes.	Using Text Variables to Perform Calculations Objective 4: To create formulae that use text variables.	Event Planning with a Spreadsheet Objective 5: To use a spreadsheet to help plan a school cake sale.	Setting the scene Objective 6: To begin planning a game.	Creating the Game Environment Objective 7: To design the game environment.	The Game Quest Objective 8: To design the game quest to make it a playable game.	Finishing and Sharing Objective 9: To finish and share the game.	Evaluation Objective 10: To self- and peer evaluate.