## Key Vocabulary...

Term	Definition	
GUI – Graphical User Interface	A visual interface that lets you interact with 'blocks' of programming code to make a program.	
Variable	A value that can change while the program is running.	
lf	Used to make a decision. If a condition is met the program will do something.	
For	Allows you to run some code, a set number of times. Also called a counting loop.	
While	Used to run code 'WHILE' a condition is met. Can also be used for running code forever.	
Function	An in-built program that can be used multiple times to do something.	
Input	A function that asks the user to enter some data.	
List	A variable that can store multiple items. This can be numbers, letters or words.	
Print	A function that outputs data when the program is run.	
String	A data type that stores text. For example, 'hello'.	
Integer	A data type that stores whole numbers. For example, '24'.	
Sequence	The order in which a set of instructions appear.	



## Picture This...



## Always Remember...

Variables are like boxes. They store values.

Use the print function to output data, use the input function to enter data.

Use an 'if' statement to add a decision to your program.

Use a 'for loop' to run a program a specific number of times.

Use a 'while loop' to run a program multiple times (without specifying an end).

Use a list to store multiple values in one variable.



## Deeper Learning...

We have used a number of in-built functions already. However, you are also able to make your own functions in Python. This is a good idea if you have a piece of code that you need to run multiple times. It also tidies up your code as it removes repeated code.



Activity- What is pseudocode and why is it useful in programming? Write in pseudocode that will work out the area of a rectangle, triangle and a circle.

Define the term algorithm.

Define the term decomposition.

Name two threats to a network.

Which command is used to create a

Which command is used to get an output?

Which command is used to create a loop?

Why should passwords not be shared?

Define the term variable.

2.

3.

4.

5.

6.

7.

8.

decision?

	abulary	Picture This	Always Remember	
Name	Purpose	A B C D E F 1 Exam Marks	Spreadsheets can accept three different data types in them.	
Spreadsheet	Software package that allows you to perform calculations and create charts.	2     First Name     Surname     Maths     English     Science     Total       3	<ul><li>Numbers</li><li>Text</li><li>Formula</li></ul>	
Cell Cell/reference	An address on a spreadsheet which looks like a little box. There are over 17 billion cells on a spreadsheet so we need to be able to identify them with an address.	5       Tanya       Smith       32       34       12       78         6       Arthur       Shelby       91       82       89       262         H11       I       X       fx       Spreadsheet in value view	Never write more than one data type in the cell at any one time. CPUs are very quick but not good at remembering information. They	
	This is known as a cell reference and looks like this: A1 R18	I     Exam Marks     I     I       2     First Name     Surname     Maths     English       3     I     I     I	RAM which holds the information for it.	
Formatting	Making the contents of a cell look or behave differently. This can be changing the colour of the font, backgrounds.	4         Teresa         Wood         63         45         89         =C4+D4+E4         in formula           5         Tanya         Smith         32         34         12         =C5+D5+E5         in formula           6         Arthur         Shelby         91         82         89         =C6+D6+E6         View           7         1         Pupil         Score         Score         Score	Conditional formatting changes the appearance of the cell, depending on the value entered. Greater than 150	
	This can also be changing the contents of a cell from numbers to currency.	2Mark10=IF(B2>12,"Pass","Fail")IF statement3Simon12=IF(B3>12,"Pass","Fail")	Equal to 150	
Formula	A way of performing a calculation on a spreadsheet. = A1 * B1	4 Harold 17 =IF(B4>12,"Pass","Fail") 5 Edward 11 =IF(B5>12,"Pass","Fail")	Personal information is any information that can be linked back to you.	
Functions	A set of instructions that will perform maths tasks on a spreadsheet.	Questions/Tasks Deep	er Learning	
Modelling	Changing variables in a spreadsheet to see how it affects the result/answer.	<ol> <li>Define the term data.</li> <li>What is the purpose of formatting data?</li> <li>Define the term personal data.</li> <li>Which formula function adds up values?</li> <li>Which formula function finds an average?</li> </ol>	excellent tools to model different ) "What if? ". is by using an IF statement which est. 1 > 12. "Pass". "Fail")	
IF statement	A logic test performed using a spreadsheet.	<ul> <li>6. Which formula function finds the biggest value?</li> <li>7. Which formula function finds the smallest value?</li> </ul>	"Pass" . "Fail"	
Conditional formatting	Changing the appearance of the cell, depending on the input.	8. What symbol do you start a function with? Businesses use this positively or negat	to indicate whether a change will ively impact the business.	

ACTIVITY Complete the table that calculates now much a charity shop will receive from the government with gift dia.

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