Amblecote Primary School—Knowledge Organisers

Phase: 3/4	Subject: Computing	Focus: Coding 3.1 & 4.1	Term: Summer

What I should already know?

- That a series of instructions correctly put together will allow a system to run a specific job to benefit the user.
- Be able to state what an algorithm is.

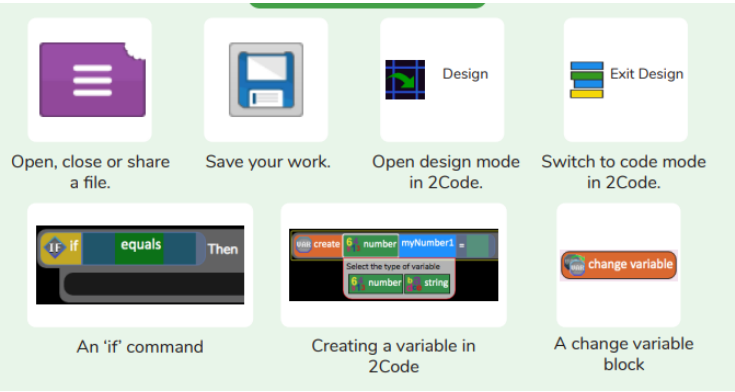
Vocabulary

Action	Types of commands, which are run on an object. They could be used to move an object or change a property.
Algorithm	A precise step by step set of instructions used to solve a problem or achieve an objective.
Bug	A problem in a computer program that stops it working the way it was designed.
Code Design	Design what your program will look like and what it will do.
Command	A single instruction in a computer program.
Control	These commands determine whether parts of the program will run, how often and sometimes, when.
Debug/ Debugging	Looking for any problems in the code, fixing and testing them.
Event	Something that causes a block of code to be run.
If	A conditional command. This tests a statement. If the condition is true, then
Object	An element in a computer program that can be changed using actions or properties. In 2Code, buttons, characters and vehicles are types of objects.
Repeat	This command can be used to make a block of commands run a set number of times or forever.
Timer	Use this command to run a block of commands after a timed delay or at regular intervals.
Variable	A named area in computer memory. A variable has a name and a value. The program can change this variable value.

Knowledge— Computing

You will learn how to:

- To design algorithms using flowcharts.
- To design an algorithm that represents a physical system and code this representation.
- To use selection in coding with the 'if' command.
- To understand and use variables in 2Code.
- To deepen understanding of the different between timers and repeat commands.



By the end of the unit I should know...

- How to build an algorithm using a flowchart that works to control a real system.
- Within the flowchart you will have used 'IF' commands which tell the computer to run a series of instructions if a variable is met.
- You will understand that a variable is something that can change and give a different value.
- How to tell the difference between timers and repeat commands—understanding that a timer is based on time and that repeat commands happen when the command finishes.

Question 1 - What is a computer simulation	Start of Unit	End of Unit
When you ask the computer to turn on		
When a computer system replicate a real life situation		
When I play a video game, such as Minecraft		
When the computer gets too hot		
Don't know		

Question 3 - What does this button do? 	Start of Unit	End of Unit
Deletes all of my work		
Sends my work to a teacher		
Saves my work		
Deletes everyone's work		
Don't know		

Question 2- If I set an 'IF' statement to the following what will happen at 30 seconds on the timer? IF [Timer]=30 then [alarm volume] 10	Start of Unit	End of Unit
Nothing will happen		
The alarm will make a really loud noise		
The alarm volume will be set to 10		
The computer will turn off		
Don't know		

Question 4- What are the different object types? Select more than 1.	Start of Unit	End of Unit
Buttons		
Pillows		
Zips		
Characters		
Don't know		

What I have enjoyed learning in coding?

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