Year 6 Computing Autumn	
6.2 Purple Mash Online Safety • To design a playable game with a timer and a score. • To plan and use selection and variables. • To understand how the launch command works. • To use functions and understand why they are useful. • To understand how functions are created and called. • To use flowcharts to create and debug code. • To create a simulation of a room in which devices can be controlled. • To understand how user input can be used in a program. • To understand how 2Code can be used to make a text-adventure game. *Programming with physical devices:* **Teach Computing- Programming B- sensing- Micro:bits** This unit brings together elements of all the four programming constructs: sequence, repetition, selection from Year 5, and variables. It offers pupils the opportunity to use all of these constructs in a different, but still familiar environment, while also utilising a physical device — the micro:bit. The unit begins with a simple program for pupils to build in and test within the new programming environment, before transferring it to their micro:bit.	**6.1 –Purple Mash –Coding** • To design a playable game with a timer and a score. • To plan and use selection and variables. • To understand how the launch command works. • To use functions and understand why they are useful. • To understand how functions are created and called. • To use flowcharts to create and debug code. • To create a simulation of a room in which devices can be controlled. • To understand how user input can be used in a program. • To understand how 2Code can be used to make a text-adventure game.
Spring	
6.3-Purple Mash- Spreadsheets • To use a spreadsheet to investigate the probability of the results of throwing many dice. • To use a spreadsheet to calculate the discount and final prices in a sale. • To use a spreadsheet to plan how to spend pocket money and the effect of saving money. • To use a spreadsheet to plan a school charity day to maximise the money donated to charity. **Safer Internet Day- assembly and lesson**	**6.8 –Purple Mash –Binary** To examine how whole numbers are used as the basis for representing all types of data in digital systems. • To recognise that digital systems represent all types of data using number codes that ultimately are patterns of 1s and 0s (called binary digits, which is why they are called digital systems). • To understand that binary represents numbers using 1s and 0s and these represent the on and off electrical states respectively in hardware and robotics
Summer	
6.6- Purple Mash- Networks • To learn about what the Internet consists of. • To find out what a LAN and a WAN are. • To find out how the Internet is accessed in school. • To research and find out about the age of the Internet.	**6.9- Purple Mash- Spreadsheets Excel** • To know what a spreadsheet looks like. • To navigate and enter data into cells. • To introduce some basic data formulae in Excel for percentages, averages and max and min numbers. • To demonstrate how the use of Excel can save time and effort when performing calculations. • To use a spreadsheet to model a real-life situation. • To demonstrate how Excel can make complex data clear by manipulating the way it is presented. • To create a variety of graphs in Excel. • To apply spreadsheet skills to solving problems.