## Computing department - year 8 computing scheme of work

## National curriculum:

 $\underline{https://ambitiousaboutautism.sharepoint.com/sites/TRS/Computing/Forms/AllItems.aspx?id=\%2Fsites}$ %2FTRS%2FComputing%2FResources

Term	Title	Unit content	Key vocabulary
Autumn	Unit 4: Computer Components, Binary and Hexadecimal	VLE Introduction/Recap	VLE, Google Classroom
Week 1 – 15		E-Safety	SMART, social media, Online Gaming, Mobile Apps, Cyber-Bullying, Email
		Computer components Part 1	Mouse, Keyboard, Motherboard, Hard Drive/Hard Disk, CPU, RAM, ROM, Cache, Cores
		Introduction to Binary	Bits, Nibbles, Bytes, Megabytes, Gigabytes, Terabytes, Petabytes
		Denary to Binary Conversions	Base 10, Base 2, Place Values
		Denary to Hexadecimal Conversions	Base 16, Base 10, Place Values
		Logic Gates	AND, OR, NOT, Circuits
Assessment	point 1		•

Assessment point 1

Term	Title	Unit content	Key vocabulary
Spring Week 1 – 11	Unit 5 Control, Flowcharts and Algorithms	Flowcharts	Start, Stop, Input, Output, Decisions, Sub Routines
		Control Technology using Flowol Interactive Flowcharts	Flowol, Mimics, Input, Output, Start, Stop, Input, Output, Decisions, Sub Routines
		Dash and Dot Robot Technology and the Friendship Algorithm	Robotics, Block Coding
Assessment	point 2	Friendship Algorithm	

Term	Title	Unit content	Key vocabulary	
Summer Week 1 – 13	Unit 6 Block Programming with Microbits, Scratch and Code.org	Microbits	Block coding, Embedded Systems, Sound, Processor, LEDs, Buttons, Accelerometer, Temperature sensor, Light sensor, Compass, Radio, Pins	
		Scratch	Motion, Looks, Sound, Events, Control, Sensing, Operators, Variables, Custom Block, Costumes, Sprites, Backdrops, Code	
		Code.org	Block coding	
Assessment point 3				