


Computing Whole School Overview 2019-20

Pupils will be taught...

	Autumn Term	Spring Term	Summer Term
Year 1	<p>Logging in to the system – Changes Toys –</p> <ul style="list-style-type: none"> • Images on 2CASS – sneaky programming • Robot building • Lego building – Brick challenges, transfer to computer 	<p>Animals</p> <p>Games Making –</p> <ul style="list-style-type: none"> • 2DIY Games • Link to current theme. • Share games and add instructions • What makes a good game? 	<p>Local Area – Digital Media</p> <ul style="list-style-type: none"> • Pupils to research local area using Google Earth and the internet • Using images from visits pupils to create a short piece of writing • Pupils to load and share work with others
Year 2	<p>Logging in to the system – Changes Local Area –</p> <ul style="list-style-type: none"> • Manningham Mills. Weaving algorithms, textile industry. • Clicker 7 – Family trees • Maps – Directions home, follow simple instructions <p>Great Fire of London</p> <ul style="list-style-type: none"> • Pupils will use different aspects of digital media when looking at this topic. • This will include 2simple software, paint.net and purplemash 	<p>Cold Places</p> <p>Digital Art –</p> <ul style="list-style-type: none"> • Looking at a variety of different artist’s pupils with use the computers to create their own art. • These will either be recreations or taking inspiration from the artists. • Pupils will learn the benefits of using a stylus with technology <p>Hot and Cold – Digital media</p> <ul style="list-style-type: none"> • Creating/manipulating and saving content based on the class text ‘Where the Wild Things Are’. Non-Chron reports on animals and beasts in a jungle, how we use a computer to create interesting settings • Minecraft – Igloos 	<p>Seaside – Digital Media</p> <ul style="list-style-type: none"> • Using images and themes from the classroom and visit pupils are to create/manipulate/edit/save/load work • This will include 2simple software, paint.net and purplemash <p>Control – Beebots</p> <ul style="list-style-type: none"> • Beebot control software. • Continue and develop to robots on the floor.

<p>Year 3</p>	<p>Logging in to the system – Changes</p> <p>Basic Intro to Coding Logo on Purplemash – simple shapes and patterns Code.org website logon. Follow course 1 with the pupils.</p> <p>Stone/Bronze/Iron age –</p> <ul style="list-style-type: none"> • Where did people live? • Search technologies – safe searching, keywords image collages • 3D Printing – Magicavoxel builds • Minecraft villages 	<p>Hello Ruby</p> <ul style="list-style-type: none"> • Unplugged computing • Exploring the inside of a computer • Unplugged algorithms • Exploring the internet and how it works <ul style="list-style-type: none"> • Interland internet safety 	<p>Discoveries – Egypt</p> <ul style="list-style-type: none"> • 3d modelling - magicavoxel • beetleblocks - coding and art • 3dprinting • Cartouche building • Hieroglyphics <p>Minecraft</p> <ul style="list-style-type: none"> • Pyramids • Talk about the slaves building them • Look at different constructions
<p>Year 4</p>	<p>Logging in to the system – Changes Making Art with Code</p> <ul style="list-style-type: none"> • Scratch art projects – Spirograph, stamping, Rangoli, shells • Beetleblocks – 3DPrints • Unplugged activities – Wallpaper art sheets from Hello Ruby <p>Circuits</p> <ul style="list-style-type: none"> • Using coding and computers to create circuits. • Paper circuits to make torches • Makey Makey introduction • Sound boards, games controllers, musical pages. 	<p>Google Sketchup & MagicaVoxel</p> <ul style="list-style-type: none"> • Pupils to learn advanced tools and shapes on Sketchup, links with numeracy • Pupils to put these into action after a few weeks' tuition, and create their own space station. • Use the 3d printer to share work • Building space craft and other creative ideas on Magicavoxel - 3dprint 	<p>Ancient Egypt</p> <ul style="list-style-type: none"> • Minecraft builds - <ul style="list-style-type: none"> ○ Pyramids ○ Tombs ○ Egyptian housing • 3d printing <ul style="list-style-type: none"> ○ prints for writing in class ○ cartouche models • Hieroglyphics translations <p>Minecraft</p> <ul style="list-style-type: none"> • Pyramids • Talk about the slaves building them • Look at different constructions

<p style="text-align: center;">Year 5</p>	<p>Logging in to the system – Changes Environment</p> <ul style="list-style-type: none"> • Microbits – Intro lessons, building data loggers, Enviro:bit • Data representation – Data from microbits, air quality sensor. • How does computing affect the environment? Plastic, Rare earth metals, power use <p>Physical Computing continued</p> <ul style="list-style-type: none"> • Makey Makey activities • Buttons • Sliders • Arcade controls for games • Christmas sound boards • Interactive story books 	<p>Google Sketchup & MagicaVoxel</p> <ul style="list-style-type: none"> • Pupils to learn advanced tools and shapes on Sketchup, links with numeracy • Pupils to put these into action after a few weeks' tuition, and create their own space station. • Use the 3d printer to share work • Building space craft and other creative ideas on Magicavoxel - 3dprint 	<p>Chocolate</p> <p>3D printing chocolate moulds Geography – Google earth – chocolate production Sway – Content creation, display and share Teams – online learning environments</p> <p>Wearables</p> <ul style="list-style-type: none"> • Using the Microbit & LEDs to create wearable tech. • Step-o-meters • Compasses
<p style="text-align: center;">Year 6</p>	<p>Logging in to the system – Changes Networks –</p> <ul style="list-style-type: none"> • Networking topologies • Packet Tracer digital homes • Internet vs www • Impact of the internet on local communities, school, fake news, social media • Sending and transferring data packets <p>Music Making</p> <ul style="list-style-type: none"> • Sonic Pi – Text coding • Makey Makey – Guitars • Makey Makey – Sound bar • Microbit – Hack headphones • 	<p>STEM based learning</p> <ul style="list-style-type: none"> • creating marble mazes • digital on magicavoxel, create on 3d printer • build in cardboard • connect makey makey for sounds. <p>Microbit –</p> <ul style="list-style-type: none"> • Independent Build challenges • Zip halo light rings – Christmas decorations • LED Light strips – Create wearables • Makecode activities • Adapt and use scroll:bit 	<p>Sats Revision/ Retro Gaming</p> <ul style="list-style-type: none"> • Time for sats intervention groups and revision on the PCs. • Retro gaming unit as a stress relief. Well being! • Gaming competitions mixed with history of computers and hardware activities <p>CodeCademy / Code Combat</p> <ul style="list-style-type: none"> • Moving the pupils to text based programming • XRay Goggles.