

MTP for Computing

Year 6

National Curriculum aim 1 Computer Science	National Curriculum aim 2 Information Technology	National Curriculum aim 3 Digital Literacy
<ul style="list-style-type: none"> the study of the foundational principles and practices of computation and computational thinking, and their application in the design and development of computer systems 	<ul style="list-style-type: none"> the creative and productive use and application of computer systems, hardware and software 	<ul style="list-style-type: none"> the ability of learners to use, express themselves and develop their ideas through information and communication technology with regard to safeguarding and online etiquette.
<p style="text-align: center;">Assessment</p>	<p style="text-align: center;">Assessment</p>	<p style="text-align: center;">Assessment</p>
<ul style="list-style-type: none"> ✓ Purple mash assessment – Gibbon act 2 – Earth mission ✓ Purple mash challenge – Gibbon Challenge <p>Knowledge quiz</p>	<ul style="list-style-type: none"> ✓ Use search engines appropriately to research a given document <p>General – explain the differences between hardware and software Digital image – Add images they have sources/manipulated to bigger projects, e.g. publisher or power point. Word – type extended piece of writing (applying previous skills), add page numbers Publisher – produce own document applying a range of skills previously taught. Excell – produce own document presenting data applying a range of skills previously taught. Powerpoint – produce own slideshow applying a range of skills previously taught.</p> <p>Knowledge quiz</p>	<ul style="list-style-type: none"> ✓ Use search engines appropriately ✓ Slideshow/poster of online safety? ✓ Create a positive digital footprint ✓ Create posts/comments on an existing blog ✓ Create their own blog ✓ <p>Knowledge quiz</p>
<p style="text-align: center;">Key knowledge</p>	<p style="text-align: center;">Key knowledge</p>	<p style="text-align: center;">Key knowledge</p>
<ul style="list-style-type: none"> Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts 	<ul style="list-style-type: none"> Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, 	<ul style="list-style-type: none"> Use technology safely, respectfully and responsibly; recognise acceptable/ unacceptable behaviour; identify a range of ways to report concerns about content and contact

<ul style="list-style-type: none"> • Use sequence, selection, and repetition in programs; work with variables and various forms of input and output • Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs <p>Children should be able to independently carry out activities.</p>		<ul style="list-style-type: none"> • E Safety: use of social media - Facebook, Twitter etc. keeping children safe (personal information/photos, others information, trusted people etc.)
Key skills	Key skills	Key skills
<ul style="list-style-type: none"> • Turn complex programming tasks into an algorithm – identifying important aspects (abstraction), decomposing them applying previous skills. • Test and debug their own program and they go – identifying causes of bugs. • Use a systematic approach to identify a particular line of code causing a problem. • Translate algorithms containing sequence, selection and repetition into code. • Use of nesting structures in code. • Use of variables in coding • Include outputs such as sounds and movement and inputs such as button clicks and the value of functions. • 	<ul style="list-style-type: none"> • Identify and explain the difference between the internet and the world wide web. • Know what a WAN and LAN are – access these on the school internet. <p>General skills and hardware knowledge</p> <ul style="list-style-type: none"> • Difference between hardware and software (<i>ready for work in year 7</i>) <p>Digital images (photos, paint, animation)</p> <ul style="list-style-type: none"> • Use images that they have sourced / captured / manipulated as part of a bigger project (e.g. presentation) <p>Word Processing</p> <ul style="list-style-type: none"> • Extended typing (published piece) to revisit skills taught and introduce others if needed (e.g. pictures, tables etc.), add page numbers, <p>Publisher</p> <ul style="list-style-type: none"> • Apply all previous skills to make a document. <p>Excell</p> <ul style="list-style-type: none"> • Apply skills already taught <p>PowerPoint</p> <ul style="list-style-type: none"> • Apply skills already taught 	<ul style="list-style-type: none"> • Apply filters when searching for digital content • Capmare a range of digital content sources – rate them in terms of content quality and accuracy. • Make clear connects to audience when creating digital content. • Design and create own blogs – identify improvements, making some refinements • Identify descrete inappropriate behaviour online. • Use SMART rules to guide them online. • Navigate networks within purple mash. • Able to ask for help if they are worried or distressed by something online. • Use a variety of networked devices – webcams, rpinters, tablets etc. • Protect their digital footprint • Understand how what they ahare inpacts upon themselves and others in the long-term. • Know consequences of promoting inappropriate content. – know how to report • Use search tools confidently and appropriately

		<ul style="list-style-type: none"> • Know they have a responsibility to others when sharing digital content. • Promote a positive online image I their digital footprint • Know how to protect their identity and not to share their location • Know they difference between copy write and privacy. • Create and post comments on blogs • Demonstrate and awareness of the issues surrounding inappropriate posts and cyberbullying • Carefully consider their response to a blog post • Behave respectfully online • Know that there is an approval process for posts •
Key vocabulary	Key vocabulary	Key vocabulary
<p>function, tabs,</p> <p><i>Plus all previous – See vocabulary progression document</i></p>	<p>General – Internet, World Wide Web, network, server, Local area network (LAN), Wide area network (WAN), router, network cables, wireless, base 10, base 2, binary, bit, byte, decimal, base-10, denary, digit, gigabyte (GB), integer, kilobyte (KB), machine code, megabyte (MB), nibble, switch, terabyte (TB), transistor, variable.</p> <p>Digital image – Capture, manipulate, open, find, insert, edit,</p> <p>Word – Revisit all previous</p> <p>Publisher – Revisit all previous</p> <p>Excell – Revisit all previous</p> <p>Powerpoint – Revisit all previous</p> <p><i>Plus all previous – See vocabulary progression document</i></p>	<p>Screen time, spoof website,</p> <p><i>Plus all previous – See vocabulary progression document</i></p>
Links and Resources	Links and Resources	Links and Resources
<p>➤ Coding unit – plans and slide shows https://www.purplemash.com/#tab/teache</p>	<p>➤ Networks – plans and slide https://www.purplemash.com/#tab/teachers/comp</p>	<p>➤ Online safety unit – plans and slide shows https://www.purplemash.com/#tab/teache</p>

<p>rs/computing_sow/computing_sow_y6/computing_sow_y6 unit 6-1</p> <ul style="list-style-type: none"> ➤ Text adventures - plans and slides (links to coding) https://www.purplemash.com/#tab/teachers/computing_sow/computing_sow_y6/computing_sow_y6 unit 6-5 ➤ ➤ Assessment guid linked to purple mash coding - https://static.purplemash.com/mashcontent/applications/englishframework/2Code_Guided_Assessment_Teacher_Guide/Assessments%20User%20Guide.pdf ➤ Barefoot computing support - https://www.barefootcomputing.org/my-barefoot-my-curriculum 	<p>uting_sow/computing_sow_y6/computing_sow_y6_unit_6-6</p> <ul style="list-style-type: none"> ➤ Spreadsheets – plans and slides https://www.purplemash.com/#tab/teachers/computing_sow/computing_sow_y6/computing_sow_ms_excel ➤ Guide for using Microsoft Paint https://www.youtube.com/watch?v=hl nodEYZ71w ➤ Beginners guide to Microsoft word https://www.youtube.com/watch?v=S-nHYzK-BVg ➤ Bwginners guide to Microsoft Publisher https://www.youtube.com/watch?v=Cqo0PVhBFYI ➤ Beginners guide to Microsoft Excell https://www.youtube.com/watch?v=rwbho0CgEAE&list=RDCMUCYUPLUcKMiUgiyVuluCc7tQ&index=1 ➤ Beginners guid to Microsoft PowerPoint https://www.youtube.com/watch?v=XF34-Wu6qWU ➤ Further guide for use with Microsoft softwear https://www.youtube.com/channel/UCYUPLUcKMiUgiyVuluCc7tQ ➤ 	<p>rs/computing_sow/computing_sow_y6/computing_sow_y6 unit 6-2</p> <ul style="list-style-type: none"> ➤ Blogging – plans and slides https://www.purplemash.com/#tab/teachers/computing_sow/computing_sow_y6/computing_sow_y6_unit_6-4 ➤
<ul style="list-style-type: none"> ❖ Year 6 curriculum overview and schemes of work https://www.purplemash.com/#tab/teachers/computing_sow/computing_sow_y6 ❖ Purple Mash computing curriculum resources https://www.purplemash.com/#tab/pm-home/computing ❖ Unplugged activities https://www.purplemash.com/#tab/teachers/computing_sow/computing_sow_unplugged these are usefull for when classes cannot access laptops or tablets. Also for visual/practical learning needed further support in understanding. ❖ CPD – this section of purple mash has some training sessions, webinars, PDF guides etc to support you within the computing curriculum and using purple mash. https://www.purplemash.com/#tab/teachers ❖ Progression of skills documents https://www.purplemash.com/#tab/teachers/computing_sow/assessment_tools/progression_of_skills ❖ Computing vocabulary/glossary https://www.purplemash.com/#tab/teachers/computing_sow/computing_vocabulary_1to6_uk ❖ 		