

**Computing Medium Term Plan 2021-22 – Cycle A**

**Autumn 1**

**Autumn 2**

**Key Stage 1**

**Online Safety and Getting Started**

- Recognise common uses of information technology in the home and school environment. (Computers) (1)
- Recognise common uses of information technology beyond school. (Computers) (2)
- Use technology purposefully to create digital content. (Using Computer) (1)
- Understand where to go for help and support when he/she has concerns about content or contact on the internet or other online technologies. (E-Safety) (1)
- Use technology safely and keep personal information private. (E-Safety) (2)

**Lower Key Stage 2**

**Online Safety**

- Use technology safely and respectfully, keeping personal information private. (E-Safety) (3)
- Use technology safely and recognise acceptable and unacceptable behaviour. (E-Safety) (3)
- Use technology responsibly and understand that communication online may be seen by others. (E-Safety) (4)
- Understand where to go for help and support when he/she has concerns about content or contact on the internet or other online technologies. (E-Safety) (4)
- Understand that computer networks enable the sharing of data and information. (Networks) (3)
- Understand that the internet is a large network of computers and that information can be shared between computers. (Networks) (3)
- Understand what servers are and how they provide services to a network. (Networks) (4)

## Upper Key Stage 2

### Online Safety

- Begin to use internet services to share and transfer data to a third party. (Networks) (5)
- Understand how computer networks enable computers to communicate and collaborate. (Networks) (6)
- Begin to use internet services within his/her own creations to share and transfer data to a third party. (Networks) (6)
- Understand the need to only select age appropriate content. (E-Safety) (5)
- Use technology respectfully and responsibly. (E-Safety) (6)
- Identify a range of ways to report concerns about content and contact in and out of school. (E-Safety) (6)
- Use filters in search technologies effectively. (Net Searching) (5)
- Use filters in search technologies effectively and appreciates how results are selected and ranked. (Net Searching) (5)
- Be discerning when evaluating digital content. (Net Searching) (6)
- Use filters in search technologies effectively and is discerning when evaluating digital content. (Net Searching) (6)
- Independently select and use appropriate software for a task. (Using Computer) (5)
- Independently select, use and combine a variety of software to design and create content for a given audience. (Using Computer) (5)
- Independently select, use and combine a variety of software to design and create content for a given audience, including collecting, analysing, evaluating and presenting data and information. (Using Computer) (6)
- Design and create a range of programs, systems and content for a given audience. (Using Computer) (6)
- Independently select, use and combine a variety of software to collect, analyse, evaluate and present data and information. (Using Computer) (6)

<b>Computing Medium Term Plan 2021-22 – Cycle A</b>	
<b>Spring 1</b>	<b>Spring 2</b>
<b>Key Stage 1</b>	
<b>Online Safety and Rocket to the moon</b>	<b>Online Safety and Algorithms Unplugged</b>
<ul style="list-style-type: none"> <li>• Use technology purposefully to create digital content. (Using Computer) (1)</li> <li>• Use technology purposefully to create, organise, store, manipulate and retrieve digital content. (Using Computer) (2)</li> <li>• Use technology purposefully to create digital content comparing the benefits of different programs. (Using Computer) (2)</li> <li>• Understand where to go for help and support when he/she has concerns about content or contact on the internet or other online technologies. (E-Safety) (1)</li> <li>• Use technology safely and keep personal information private. (E-Safety)</li> <li>• Predict the behaviour of simple programs. (Coding) (1)</li> <li>• Understand what algorithms are and how they are implemented on digital devices. (Coding) (1)</li> <li>• Use logical reasoning to predict the behaviour of simple programs. (Coding) (2)</li> <li>• Create simple programs. (Coding) (2)</li> <li>• Create and debug simple programs. (Coding) (2)</li> <li>• Debug simple programs by using logical reasoning to predict the actions instructed by the code. (Coding) (2)</li> <li>• Understand that programs execute by following precise and unambiguous instructions. (Coding) (2)</li> </ul>	<ul style="list-style-type: none"> <li>• Understand where to go for help and support when he/she has concerns about content or contact on the internet or other online technologies. (E-Safety) (1)</li> <li>• Use technology safely and keep personal information private. (E-Safety)</li> <li>• Predict the behaviour of simple programs. (Coding) (1)</li> <li>• Understand what algorithms are and how they are implemented on digital devices. (Coding) (1)</li> <li>• Use logical reasoning to predict the behaviour of simple programs. (Coding) (2)</li> <li>• Create simple programs. (Coding) (2)</li> <li>• Create and debug simple programs. (Coding) (2)</li> <li>• Debug simple programs by using logical reasoning to predict the actions instructed by the code. (Coding) (2)</li> <li>• Understand that programs execute by following precise and unambiguous instructions. (Coding) (2)</li> </ul>
<b>Lower Key Stage 2</b>	
<b>Safer Internet Day</b>	
<ul style="list-style-type: none"> <li>• LKS2 will be taking part in Safer Internet Day.</li> </ul>	
<b>Upper Key Stage 2</b>	
<b>Safer Internet Day</b>	<b>Programming Music</b>
<ul style="list-style-type: none"> <li>• UKS2 will be taking part in Safer Internet Day.</li> </ul>	<ul style="list-style-type: none"> <li>• Design, input and test an increasingly complex set of instructions to a program or device. (Coding) (5)</li> <li>• Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems. (Coding) (5)</li> <li>• Design, write and test simple programs that follow a sequence of instructions or allow a set of instructions to be repeated. (Coding) (5)</li> <li>• Design write and test simple programs with opportunities for selection, where a particular result will happen based on actions or situations controlled by the user. (Coding) (5)</li> </ul>

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|  | <ul style="list-style-type: none"><li>• Use logical reasoning to explain how increasingly complex algorithms work to ensure a program's efficiency. (Coding) (5)</li><li>• Include use of sequences, selection and repetition with the hardware used to explore real world systems. (Coding) (6)</li><li>• Solves problems by decomposing them into smaller parts. (Coding) (6)</li><li>• Create programs which use variables. (Coding) (6)</li><li>• Use variables, sequence, selection, and repetition in programs. (Coding) (6)</li><li>• Use logical reasoning to explain how increasingly complex algorithms work and to detect and correct errors in algorithms and programs efficiently. (Coding) (6)</li></ul> |
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**Computing Medium Term Plan 2021-22 – Cycle A****Summer 1****Summer 2****Key Stage 1****Online Safety and Creating Media: Digital Imagery**

- Recognise common uses of information technology in the home and school environment. (Computers) (1)
- Recognise common uses of information technology beyond school. (Computers) (2)
- Use technology purposefully to create digital content. (Using Computer) (1)
- Use technology purposefully to create, organise, store, manipulate and retrieve digital content. (Using Computer) (2)
- Use technology purposefully to create digital content comparing the benefits of different programs. (Using Computer) (2)
- Understand where to go for help and support when he/she has concerns about content or contact on the internet or other online technologies. (E-Safety) (1)
- Use technology safely and keep personal information private. (E-Safety) (2)

**Lower Key Stage 2****Programming Scratch**

- Design, write and debug programs that control or simulate virtual events. (Coding) (3)
- Use logical reasoning to explain how some simple algorithms work. (Coding) (3)
- Decompose programs into smaller parts. (Coding) (4)
- Use logical reasoning to detect and correct errors in algorithms and programs. (Coding) (4)
- Select, use and combine a variety of software, systems and content that accomplish given goals. (Coding) (4)

**Creating Video: Media Trailer**

- Recognise familiar forms of input and output devices and how they are used. (Computers) (3)
- Make efficient use of familiar forms of input and output devices. (Computers) (3)
- Use other input devices such as cameras or sensors. (Computers) (4)
- With support select and use a variety of software to accomplish goals. (Using Computer) (3)
- With support select and use a variety of software on a range of digital devices. (Using Computer) (4)
- With support select, use and combine a variety of software on a range of digital devices to accomplish given goals. (Using Computer) (4)

## Upper Key Stage 2

### Data Handling

- Begin to use internet services to share and transfer data to a third party. (Networks) (5)
- Understand how computer networks enable computers to communicate and collaborate. (Networks) (6)
- Begin to use internet services within his/her own creations to share and transfer data to a third party. (Networks) (6)
- Design, input and test an increasingly complex set of instructions to a program or device. (Coding) (5)
- Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems. (Coding) (5)
- Design, write and test simple programs that follow a sequence of instructions or allow a set of instructions to be repeated. (Coding) (5)
- Design write and test simple programs with opportunities for selection, where a particular result will happen based on actions or situations controlled by the user. (Coding) (5)
- Use logical reasoning to explain how increasingly complex algorithms work to ensure a program's efficiency. (Coding) (5)
- Include use of sequences, selection and repetition with the hardware used to explore real world systems. (Coding) (6)
- Solves problems by decomposing them into smaller parts. (Coding) (6)
- Create programs which use variables. (Coding) (6)
- Use variables, sequence, selection, and repetition in programs. (Coding) (6)
- Use logical reasoning to explain how increasingly complex algorithms work and to detect and correct errors in algorithms and programs efficiently. (Coding) (6)