

## SUBJECT: ICT/Computing

### Key Stage 3: Curriculum Intent (BRIEF):

| 2020-2021    | Year 7                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Year 8                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Year 9                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
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| Autumn 1 & 2 | <p><b>Topic:</b> E-safety</p> <p><b>Content covered, including knowledge and skills:</b></p> <ul style="list-style-type: none"> <li>- Organising files</li> <li>- Preparing folders for each unit being studied</li> <li>- E-Safety</li> <li>- Staying safe online</li> <li>- Social networking</li> <li>- Cyberbullying</li> <li>- GDPR</li> <li>- Emails</li> </ul> <p><b>Links to prior learning:</b></p> <ul style="list-style-type: none"> <li>- E-safety</li> </ul> <p><b>Links to British Values and SMSC</b><br/>Developing a sense of understanding on the significance of staying safe online.<br/>Introduces pupils to the dangers of social networking websites and cyberbullying and the dangers to their technology such as viruses,</p> | <p><b>Topic:</b> Staying Safe</p> <p><b>Content covered, including knowledge and skills:</b></p> <ul style="list-style-type: none"> <li>- Staying safe</li> <li>- Bullying and cyberbullying</li> <li>- Impact of technology</li> </ul> <p><b>Links to prior learning:</b></p> <ul style="list-style-type: none"> <li>- E-safety</li> </ul> <p>This unit teaches the pupils about how to stay safe when using the internet and social networking websites. They look at the effects of cyber bullying and what to do if they are being bullied or see somebody else being bullied. They also learn about the dangers to their technology including viruses, worms, and Trojans.</p> <p><b>Links to British Values and SMSC</b><br/>Considering the impacts explains basic terminology about hardware and software, the history of computers, the</p> | <p><b>Topic:</b> E-safety and stay Safe online as well as PowerPoint and Excel</p> <p><b>Content covered, including knowledge and skills:</b></p> <ul style="list-style-type: none"> <li>- Organising files</li> <li>- Preparing folders for each unit being studied</li> <li>- E-Safety</li> <li>- Staying safe online</li> <li>- Social networking</li> <li>- Cyberbullying</li> <li>- GDPR</li> <li>- Emails</li> <li>- Staying safe</li> <li>- Bullying and cyberbullying</li> <li>- Impact of technology</li> </ul> <p><b>Links to prior learning:</b></p> <ul style="list-style-type: none"> <li>- E-safety</li> </ul> <p><b>Links to British Values and SMSC</b><br/>Dangers of social networking websites and cyberbullying and the dangers to their technology such as viruses, worms, and Trojans.</p> |

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|                | <p>worms, and Trojans. They work in groups which will allow them to build on a range of social skills and taking into accounts the views of others.</p> <p><b>Career opportunities:</b></p> <ul style="list-style-type: none"> <li>- Programmer</li> <li>- Gamer</li> <li>- IT technician</li> <li>- Teacher</li> </ul> <p><b>Literacy: Key words and terminology</b></p> <ul style="list-style-type: none"> <li>- GDPR</li> <li>- E-safety</li> <li>- Social awareness</li> <li>- Emails</li> <li>- GDPR</li> <li>- Social awareness</li> </ul> | <p>internet and cloud computing. Having a fascination of technological events and the influences it has. Developing social skills whilst interacting and collaborating with others.</p> <p><b>Career opportunities:</b></p> <ul style="list-style-type: none"> <li>- Programmer</li> <li>- Gamer</li> <li>- IT technician</li> <li>- Teacher</li> </ul> <p><b>Literacy: Key words and terminology</b></p> <ul style="list-style-type: none"> <li>- Cyberbullying</li> <li>- Social media</li> <li>- Technology</li> <li>- GDP</li> <li>- Collaboration</li> <li>- Influences</li> <li>- Awareness</li> <li>- Trolls</li> <li>- Safety</li> </ul> | <p>They work in groups which will allow them to build on a range of social skills and taking into accounts the views of others.</p> <p><b>Career opportunities:</b></p> <ul style="list-style-type: none"> <li>- Programmer</li> <li>- Gamer</li> <li>- IT technician</li> <li>- Teacher</li> </ul> <p><b>Literacy: Key words and terminology:</b></p> <ul style="list-style-type: none"> <li>- Cyberbullying</li> <li>- Social media</li> <li>- Technology</li> <li>- GDP</li> <li>- Collaboration</li> <li>- Influences</li> <li>- Awareness</li> <li>- Trolls</li> <li>- Safety</li> <li>- GDPR</li> <li>- E-safety</li> <li>- Social awareness</li> <li>- Emails</li> <li>- GDPR</li> <li>- Social awareness</li> </ul> |
| Spring 1 and 2 | <p><b>Topic:</b> How computers work</p> <p><b><u>Content covered, including</u></b></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <p><b>Topic:</b> Microbit</p> <p><b><u>Content covered, including knowledge</u></b></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <p><b>Topic:</b> Access project and Web development project</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |

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| <p><b><u>knowledge and skills:</u></b></p> <ul style="list-style-type: none"> <li>- Inputs and outputs</li> <li>- Components in a computer</li> <li>- Hardware</li> <li>- Software</li> <li>- RAM</li> <li>- CPU</li> <li>- User interfaces</li> <li>- Binary</li> <li>- Operating systems</li> </ul> <p><b><u>Links to prior learning:</u></b><br/>Understanding the safety of computers and how they work</p> <p><b><u>Career opportunities:</u></b></p> <ul style="list-style-type: none"> <li>- Programming</li> <li>- IT engineer</li> <li>- Gamer</li> <li>- Teacher</li> </ul> <p><b><u>Links to British Values and SMSC</u></b><br/>Learning about how computers work and how they are a useful resource in today society. Using a range of social skills and considering the views of others.</p> <p><b><u>Literacy: Key words and terminology</u></b></p> <ul style="list-style-type: none"> <li>- Memory</li> <li>- Graphics Card</li> <li>- Hard drive/SSD</li> </ul> | <p><b><u>and skills:</u></b></p> <ul style="list-style-type: none"> <li>- Sequencing</li> <li>- Variables and lists</li> <li>- Iteration and Selection</li> <li>- Accelerometer</li> <li>- Music</li> <li>- Networking</li> </ul> <p><b><u>Links to prior learning:</u></b><br/>Being able to use previous knowledge of the influences of how computers work will essential enable students to understand the microbit and how it can be programmed to do a number of different things, it can be a digital watch, fitness tracker or a games console. The device features 25 LED lights and two programmable buttons, which can be used in game-play or to skip through tracks in a playlist.</p> <p><b><u>Links to British Values and SMSC</u></b><br/>Encouraging students to reflect on their own experiences of using different types of software like scratch and how these are different to other clouting programmes. Developing a range of social skills whilst interacting and collaborating with others. Encouraging students to see situations and events from the viewpoints of others.</p> | <p><b><u>Content covered, including knowledge</u></b><br/>HTML Website</p> <p>You will be developing your coding skills by earning to code using HTML to create a website about yourself, your hobbies, and interests. You learn to use tags to create your webpages.</p> <p><b><u>Future Technology and Ethics</u></b><br/>Students will learn about various legislations such as data protection as well as ethical issues llicked to software licensing, privacy and environment</p> |
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|                       | <ul style="list-style-type: none"> <li>- Screen</li> <li>- Printer</li> <li>- Inputs and Outputs</li> <li>- CPU</li> <li>- RAM</li> <li>- Memory</li> <li>- Graphics Card</li> <li>- Hard drive/SSD</li> <li>- Screen</li> <li>- Printer</li> <li>- Inputs and Outputs</li> <li>- Binary</li> </ul>                                                                                                                                                                                                                                                   | <p><b>Career opportunities:</b></p> <ul style="list-style-type: none"> <li>- Programmer</li> <li>- IT consultations</li> <li>- Teacher</li> <li>- Lecturer</li> <li>- Gamer</li> <li>- Software engineering</li> </ul> <p><b>Literacy: Key words and terminology:</b></p> <ul style="list-style-type: none"> <li>- Technology</li> <li>- Sequencing</li> <li>- Variables and lists</li> <li>- Iteration and Selection</li> <li>- Accelerometer</li> </ul>                                                                |                                                                                                                                                                                                                                                                                                                                                                                                      |
| <p>Summer 1 and 2</p> | <p><b>Topic: <u>Raising awareness for charities</u></b></p> <p><b>Content covered, including knowledge and skills:</b></p> <ul style="list-style-type: none"> <li>- Planning</li> <li>- Preparing multimedia</li> <li>- Storyboard</li> <li>- Creating presentations</li> <li>- Testing and generating feedback</li> <li>- Evaluation</li> </ul> <p><b>Links to prior learning:</b></p> <ul style="list-style-type: none"> <li>- Decision making skills</li> <li>- Functional skills on computer software</li> <li>- Presentational skills</li> </ul> | <p><b>Topic: <u>Exercise and Wellbeing Model</u></b></p> <p><b>Content covered, including knowledge and skills:</b></p> <ul style="list-style-type: none"> <li>- Excel</li> <li>- Excel Modelling</li> <li>- Simulations</li> <li>- IF statements</li> <li>- V look ups</li> <li>- Cells</li> <li>- Referencing</li> <li>- Calculations</li> <li>- Formulas</li> </ul> <p><b>Links to prior learning:</b></p> <ul style="list-style-type: none"> <li>- Software understanding to enable students to use excel</li> </ul> | <p><b>Topic: Web development project and Python Pprogramming</b></p> <p>Algorithms and Logic Gates<br/>Students will briefly learn about what is an algorithm and logic gates. Students learn to write truth tables for AND, OR and NOT gates.</p> <p>Advanced Excel<br/>In this unit students learn how to use advanced features of Excel such as VLOOKUPS, COUNTIF Functions and Pivot tables.</p> |

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|  | <ul style="list-style-type: none"> <li>- Social interaction</li> <li>- Effective communication</li> </ul> <p><b>Links to British Values and SMSC</b><br/>Promoting enjoyment and fascination learning about how to successfully create a charity awareness pitch. Recognising the key skills that are needed when presenting ideas. Using a range of social skills and considering the views of others.</p> <p><b>Career opportunities:</b></p> <ul style="list-style-type: none"> <li>- Researcher</li> <li>- Marketing</li> <li>- Blogger</li> <li>- Environmentalist</li> <li>- Setting up your own business</li> </ul> <p><b>Literacy: Key words and terminology:</b></p> <ul style="list-style-type: none"> <li>- Pitching</li> <li>- The Power of persuasion</li> <li>- Evaluating</li> <li>- Researching</li> </ul> | <p><b>Links to British Values and SMSC</b><br/>Encouraging students to reflect on their own practices and how they are able to use excel and apply their understanding based on what they have learnt through variables and simulations and cell reference. Developing a range of social skills whilst interacting and collaborating with others. Encouraging students to see situations and events from the viewpoints of others.</p> <p><b>Career opportunities:</b></p> <ul style="list-style-type: none"> <li>- Charity work</li> <li>- Development projects</li> <li>- Programmer</li> <li>- IT consultations</li> <li>- Teacher</li> <li>- Lecturer</li> <li>- Gamer</li> <li>- Software engineering</li> </ul> <p><b>Literacy: Key words and terminology:</b></p> <ul style="list-style-type: none"> <li>- Variable</li> <li>- Modelling</li> <li>- Simulation</li> <li>- Model</li> <li>- Variables</li> <li>- Software</li> <li>- Predict</li> </ul> |  |
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|  |  | <ul style="list-style-type: none"><li>- Danger</li><li>- If statements</li></ul> |  |
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