

Year Group/ Term	Topic	LEARNING OUTCOMES	Resources
Year 7 Term 1	Health & Safety when using computers Network security (Passwords)	Understand the need for health & safety rules Understand the importance of network security and user agreement policy. Creating “strong” passwords	Health& Safety.ppt http://www.bbc.co.uk/guides/zxgdwmn
Year 7 Term 1	Networks basics File management	Understand the basics of a computer network. Setting up and naming folders; understand the need for file management.	File management.ppt http://www.bbc.co.uk/education/guides/zc6rcdm/revision/1 http://www.bbc.co.uk/schools/gcsebitesize/dida/managing_projects/ways_of_workingrev1.shtml
Year 7 Term 1	Copyright & Plagiarism	Understand what copyright is and the copyright law. Understand what plagiarism is and how to avoid it.	Copyright & Plagiarism.ppt http://www.bbc.co.uk/education/guides/z9nk87h/revision/3
Year 7 Term 1	Using Search effectively and evaluating the reliability of sources.	Using search engines to find relevant information. Evaluate if a website could be a trusted source of information. Evaluate the reliability of information on the web. (using own critical thinking)	Effective and safe search.ppt Using search engines http://www.bbc.co.uk/guides/zt9thy http://www.bbc.co.uk/education/guides/z2g2mp3/revision/2 http://www.bbc.co.uk/education/guides/zpkhqv4/revision Searching task 1 Searching Task 2
Year 7 Term 1	Health & Safety	Understand that using technology in excess can cause physical problems such as RSI, back/neck pain, migraines, lack of sleep	Excessive use.ppt http://www.bbc.co.uk/education/guides/zkyg87h/revision/3

	issues related to using digital devices.	etc. Strategies of dealing with peer pressure, cyberbullying and stress induced by excessive use of digital devices.	http://www.dailytelegraph.com.au/technology/ipad-generation-of-children-and-teenagers-suffer-rsi-and-strains-due-to-time-playing-tablets-and-iphones/story-fn5h1vlf-1226256659345 Worksheet_physical injury Test http://www.theloop.ca/the-world-is-full-of-cell-phone-addicts-are-you-one-of-them/
Year 7 Term 1	Safe Social Networking	Understand that nothing is private on the World Wide Web. Understand the need for using privacy settings when using social media. Know what they should/shouldn't share. Risks of being online and what to do if something goes wrong.	Safe Social Networking.ppt Friend_book timeline.doc Worksheet_friendbook.doc https://esafety.gov.au/esafety-information/esafety-issues/protecting-personal-information Importance: https://esafety.gov.au/esafety-information/esafety-issues Risks: http://www.nspcc.org.uk/preventing-abuse/keeping-children-safe/online-safety/ http://www.bbc.co.uk/cbbc/watch/p01g2pt6
Year 7 Term 1	Digital Footprint & Protection of privacy	Understand that everything they do online leaves a permanent record of their activity. Know that leaving a positive digital footprint is important for their future. Being able to protect their digital reputation.	Digital Footprint.ppt Worksheet_Digital Footprint.doc https://www.commonsemmedia.org/videos/follow-the-digital-trail
Year 7 Term 2	Being a good digital citizen	Understand what is cyberbullying and know that they have a responsibility to stand up for others. Being able to describe a range of unacceptable behavior online and explain a range of strategies to help or avoid these.	Digital_citizen.ppt BE_upstandingtask.doc https://esafety.gov.au/esafety-information/esafety-issues/trolling https://www.youtube.com/watch?v=S03Br1dwJR8

			https://www.youtube.com/watch?v=vmQ8nM7b6XQ https://www.youtube.com/watch?v=eegQCyQOCPg
<p>Year 7 Term 2</p>	<p>Online risks: grooming, extremism.</p> <p>What to do if something goes wrong.</p>	<p>Being able to identify online risks such as grooming, radicalisation, content promoting violence.</p> <p>Be able to give suggestions on how to avoid or solve these threats.</p>	<p>Online_risks.ppt</p> <p>https://esafety.gov.au/esafety-information/esafety-issues/offensive-or-illegal-content</p> <p>https://www.youtube.com/watch?v=pT59DZFYCmA</p> <p>https://www.youtube.com/watch?v=-e3f3pjiUc</p>
<p>Year 7 Term 2 PSHE</p>	<p>Cyberbullying</p>	<p>Understand what is cyberbullying and how to react responsibly.</p> <p>Know that they have a responsibility to stand up for others.</p>	<p>Cyberbullying.ppt</p> <p>https://www.youtube.com/watch?v=S03Br1dwJR8</p>
<p>Year 8 Term 1</p>	<p>Health & Safety when using computers</p> <p>Network security (Passwords)</p>	<p>Understand the need for health & safety rules</p> <p>Understand the importance of network security and</p> <p>Creating “strong” passwords</p>	<p>Health& Safety.ppt</p> <p>http://www.bbc.co.uk/guides/zxgdwmn</p>
<p>Year 8 Term 1</p>	<p>Using Search engines effectively and evaluating the reliability of sources.</p>	<p>Using web search engines to find relevant information.</p> <p>Evaluate if a website could be a trusted source of information (validity)</p> <p>Evaluate the reliability of information on the</p>	<p>Effective and safe search.ppt</p> <p>Validity and reliability.doc</p> <p>Using search engines</p> <p>http://www.bbc.co.uk/guides/zt9thycttp://www.bbc.co.uk/education/guides/z2q2mp3/revision/2http://www.bbc.co.uk/education/guides/zpkhpv4/revision</p>

		web.	http://www.dhmo.org/ http://www.genochoice.com/selection.shtml http://www.floralsculptureclinic.nl/ http://www.ovaprima.org/index.htm
Year 8 Term 1	Communicating safely and respectfully online and keeping personal information private.	<p>Know what accountability means using social network.</p> <p>Understands the importance of communicating safely and respectfully online.</p> <p>Explain and justify the consequences of what is posted online</p>	<p>Communicating safely and respectfully online.ppt</p> <p>Worksheet.doc</p> <p>http://www.bbc.co.uk/news/uk-wales-17524548</p> <p>http://www.bbc.co.uk/news/uk-23249210</p>
Year 8 Term 1	Cyberbullying	<p>Understand what is cyberbullying and how to react responsibly.</p> <p>Know that they have a responsibility to stand up for others.</p> <p>Being able to identify the issues of cyber bullying in school and the environment.</p>	<p>Cyberbullying.ppt</p> <p>Activity the bullying.doc</p> <p>http://www.childline.org.uk/explore/bullying/pages/cyberbullying.aspx</p> <p>http://www.thinkuknow.co.uk/11_16/control/cyberbullying/</p> <p>http://www.cyberbullying.org/</p> <p>http://www.nhs.uk/Livewell/Bullying/Pages/Cyberbullying.aspx</p>
Year 8 Term 1	Online risks	<p>Demonstrates responsible use of technologies and on-line services and knows a range of ways to report concerns.</p> <p>Recognises what is acceptable and unacceptable behaviour when using technologies and on-line services.</p>	<p>Online risks.ppt</p> <p>Digital_footprint.doc</p> <p>http://www.youtube.com/watch?v=_o8auwnJtqE</p> <p>http://www.youtube.com/watch?v=vp5nScG6C5g</p> <p>http://www.youtube.com/watch?v=ffnQnqC2QKU</p>

<p>Year 8 Term 2 PSHE</p>	<p>Dangers of the Internet</p>	<p>Understand what risks students could encounter online and how to react responsibly. Know that they have a range of ways to report concerns.</p>	<p>Dangers of the Internet.ppt http://www.youtube.com/watch?v=vp5nScG6C5g https://www.youtube.com/watch?v=cQy-Nn9QZsc</p>
<p>Year 9 Term 1</p>	<p>Ethical and cultural issues</p>	<p>Consider the ethical and cultural issues related to computer science technologies Discuss privacy issues related to the collection of electronic data by government and commercial organisations</p>	<p>Ethical and cultural issues.ppt Worksheet Ethical and cultural issues.doc https://www.youtube.com/watch?v=mHbzTcT_ckE Activity: http://www.cambridgedigital.com/mooc/html/phase3/5_Activity1/5_Activity1.html</p>
<p>Year 9 Term 1</p>	<p>Ethical and environment issues</p>	<p>Consider how key stakeholders are affected by technologies Consider privacy and security issues Consider the environmental impact of computers and digital devices</p>	<p>Ethical and environment issues.ppt Worksheet Ethical and environment issues.doc https://www.youtube.com/watch?v=2REsMF3PfvA https://www.youtube.com/watch?v=WzR79Wv2oJA</p>
<p>Year 9 Term 1</p>	<p>Ethical and legal concerns</p>	<p>Describe legislation relevant to Computer Science:</p> <ul style="list-style-type: none"> - The Data Protection Act 1998 - Computer Misuse Act 1990 - Copyright Designs and Patents Act 1988 - Freedom of Information Act 2000 	<p>Ethical and legal concerns.ppt Worksheet Ethical and legal concerns.doc https://www.youtube.com/watch?v=ZOI2ByuG5k0 https://www.youtube.com/watch?v=zzb_XHE60cE https://www.youtube.com/watch?time_continue=2&v=umeMEOxkM1g Data protection act activity: http://www.cambridgedigital.com/mooc/html/jan14/6_Activity1/6_Activity1.html</p>
<p>Year 9 Term 2 PSHE</p>	<p>Sexting</p>	<p>Understand what is sexting and how to react responsibly. Know that they have a range of ways to report concerns.</p>	<p>Sexting.ppt https://www.youtube.com/watch?v=_lpb3FILnSU https://www.youtube.com/watch?v=YMFD5HuQDcU http://www.youtube.com/watch?v=ffnQngC2QKU</p>

			https://www.youtube.com/watch?v=FakGpaTPqD4
Year 10 Term 1	Social engineering	Understand the need for network/system security. Explain the meaning of social engineering. (blagging, phishing and shouldering) Justify the need for precautions against the threats posed by social engineering methods.	Social engineering.ppt Worksheet Social engineering.doc https://www.youtube.com/watch?v=C8MMaMoln_A https://www.youtube.com/watch?v=uVSfZPboVms Friends blagging: https://www.youtube.com/watch?v=EsfBbq1LYCM
Year 10 Term 1	Malware1	Understand what is meant by malware. Explain what it is meant by a virus, a worm and a Trojan Describe precautions to be taken against these types of malware.	Malware1.ppt Worksheet malware1.doc https://www.youtube.com/watch?v=l6JUbt81KmM&nhtml5=False https://www.youtube.com/watch?v=y8a3QoTg4VQ&nhtml5=False
Year 10 Term 1	Malware2	Understand what is meant by malware. Explain what it is meant by adware, spyware and ransomware. Describe precautions to be taken against these types of malware.	Malware2.ppt Worksheet malware2.doc https://www.youtube.com/watch?v=n8mbzU0X2nQ
Year 10 Term 1	Methods of attacking a network	Know at least four different methods for attacking a network. Explain the meaning of data interception, SQL injection and zero-day attack Research and justify preventive methods to be used against these network threats.	Methods of attacking a network.ppt Worksheet Methods of attacking a network.doc http://www.teach-ict.com/2016/videos/networks_threats.php

<p>Year 10 Term 1</p>	<p>Securing a network</p>	<p>Understand the need for physical measures in securing a network. Create and explain the rules for creating a strong password Explain the meaning of user access levels, encryption and firewalls. Justify the use of different methods for securing a network.</p>	<p>Securing a network.ppt Securing a network.doc https://howsecureismypassword.net/ http://www.passwordmeter.com/</p>
<p>Year 10 Term 2 PSHE</p>	<p>Acceptable user agreement</p>	<p>Understand the need for network policies in securing a network. Explain the acceptable user policies rules for securing the school's network.</p>	<p>Acceptable user agreement.ppt https://www.youtube.com/watch?time_continue=2&v=3C4t-tp1IHM</p>
<p>Year 11 Term 1</p>	<p>Ethical and legal concerns</p>	<p>Describe legislation relevant to Computer Science:</p> <ul style="list-style-type: none"> - The Data Protection Act 1998 - Computer Misuse Act 1990 - Copyright Designs and Patents Act 1988 - Freedom of Information Act 2000 	<p>Ethical and legal concerns.ppt Worksheet Ethical and legal concerns.doc https://www.youtube.com/watch?v=ZOI2ByuG5k0 https://www.youtube.com/watch?v=zzb_XHE60cE https://www.youtube.com/watch?time_continue=2&v=umeMEOxkM1g Data protection act activity: http://www.cambridgedigital.com/mooc/html/jan14/6_Activity1/6_Activity1.html</p>
<p>Year 11 Term 1</p>	<p>Malware</p>	<p>Understand what is meant by malware. Explain what it is meant by a virus, a worm and a Trojan Explain what it is meant by adware, spyware and ransomware. Describe precautions to be taken against these types of malware.</p>	<p>Malware1.ppt Worksheet malware.doc https://www.youtube.com/watch?v=I6JUbT81KmM&nhtml5=False https://www.youtube.com/watch?v=y8a3QoTq4VQ&nhtml5=False https://www.youtube.com/watch?v=n8mbzU0X2nQ</p>
<p>Year 11 Term 2 PSHE</p>	<p>Safe Internet</p>	<p>Demonstrates responsible use of technologies and on-line services and knows a range of ways to report concerns. Recognises what is acceptable and unacceptable behaviour when online.</p>	<p>Safe Internet.ppt https://www.youtube.com/watch?v=yrln8nyVBLU https://www.youtube.com/watch?v=hK5OeGeudBM</p>

<p>Year 12 Term 1</p>	<p>Network security Acceptable user policy</p>	<p>Understand the need for network policies in securing a network. Explain the acceptable user policies rules for securing the school's network.</p>	<p>Securing a network.ppt Securing a network.doc Acceptable user policy.ppt https://www.youtube.com/watch?time_continue=2&v=3C4t-tp1IHM Securing a network (passwords) https://howsecureismypassword.net/</p>
<p>Year 13 Term 1</p>	<p>Network security Acceptable user policy</p>	<p>Understand the need for network policies in securing a network. Explain the acceptable user policies rules for securing the school's network. Justify the rules for creating a strong password</p>	<p>Securing a network.ppt Securing a network.doc Acceptable user policy.ppt https://www.youtube.com/watch?time_continue=2&v=3C4t-tp1IHM Securing a network (passwords) https://howsecureismypassword.net/ http://www.passwordmeter.com/</p>
<p>Year 13 Term 2</p>	<p>Cybersecurity</p>	<p>Explain the methods used for attacking a network such as: malware, hacking, Denial of Service, Data Interception, Brute Force attack. Explain the methods used for protecting a network: antivirus software, firewall, Intrusion Detection, Intrusion Prevention methods, network forensics.</p>	<p>https://www.youtube.com/watch?v=I6JUbt81KmM&nohtml5=False https://www.youtube.com/watch?v=y8a3QoTq4VQ&nohtml5=False https://www.youtube.com/watch?v=n8mbzU0X2nQ Methods of attacking a network: http://www.teach-ict.com/2016/videos/networks_threats.php</p>