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| **National curriculum expectation.** | |
| **Key stage 1** | **Key stage 2** |
| Pupils should be taught to:   * understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions; * create and debug simple programs; * use logical reasoning to predict the behaviour of simple programs; * use technology purposefully to create, organise, store, manipulate and retrieve digital content; * recognise common uses of information technology beyond school;   use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies. | Pupils should be taught to:   * design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts; * 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; * understand computer networks including the internet; how they can provide multiple services, such as the world wide web, and the opportunities they offer for communication and collaboration; * use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content; * 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, including collecting, analysing, evaluating and presenting data and information; * use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact. |
| We follow the Rising Stars unit planning.  The first lesson of each half term has an additional specified online safety focus which is outlined in the below document to ensure progression of skills and coverage.  Where possible units are taught through thematic links.  **We use Rising Stars documents to support planning supported by:**  -Our half termly online safety coverage outlines.  -Our overview of units.  -Individual unit plans. | |

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|  | **Autumn 1** | **Autumn 2** | **Spring 1** | **Spring 2** | **Summer 1** | **Summer 2** |
| Year 1 | **Online safety focus**  Using technology safely.  - Keeping safe when using the internet.  -Know what to do if they have concerns about contact or content.  -Switching off the screen when unsure. | **Online safety focus**  Using technology safely-  -Keeping safe when using the internet e.g. what to do if they have concerns about contact or content.  -Switching off the screen when unsure. | **Online safety focus**  Keeping personal information safe and private when using technology. | **Online safety focus**  Use of videos and technology safely and respectfully. E.g.  -respecting those they film, consent and assent.  -Not sharing videos widely.  -Information to exclude from videos (personal data). | **Online safety focus**  Introduction to cyber bullying. | **Online safety focus**  Introduction to online messaging safety.  -E.g. Unit will involve emailing their card. |
| **1.4 We are collectors** - Finding images using the web | **1.5 We are storytellers -** Producing a talking book | **1.3 We are painters -** Illustrating an eBook | **1.2 We are TV chefs -** Filming the steps of a recipe | **1.1 We are treasure hunters** - Using programmable toys | **1.4 We are celebrating** - Creating a card electronically |
|  | **Suggested thematic link.**  Finding images of the local area. | **Suggested thematic link.** Create the talk book about the 5th of November. | **Suggested thematic link.**  Create their book about a chosen animal you are studying. | **Suggested thematic link.**  Create a recipe that their grandparents would have eaten. | **Suggested thematic link.**  Link to journeys. Program the bee-bots to take a journey on a map. | **Suggested thematic link.**  Create the card they would send to a local hero they have studied. |

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| Year 2 | **Online safety.**  Controlling images when posted online. (see online safety roadmap document).  -minimising risks.  -What to do if images are concerning.  -acceptable/ unacceptable photographs. | **Online safety.**  Keeping safe when researching on the internet. Build on knowledge from year 1.  E.g. knowing what to do when they have concerns.  -Dangers of using the internet.  -Intellectual property introduction. | **Online safety.**  Cyber bullying- linked to online gaming.  Build on knowledge from Y1. | **Online safety.**  Choosing appropriate online games for their age.  -E.g. some can be violent.  -PEGI restrictions.  -Websites that are not monitored. | **Online safety.**  Keeping personal information safe online. | **Online safety.**  Keeping personal information private when online messaging.  - Build on knowledge form Y1.  -Attaching files- do’s and don’ts.  -Spam emails.  -Account protection/ quality passwords. |
| **2.3 We are photographers** – taking, selecting and editing digital images | **2.4 We are researchers** – researching a topic | **2.1 We are astronauts –** programming on screen | **2. 2 We are games testers –** exploring how computer games work | **2.6 We are zoologists** – recording bug hunt data | **2.5 We are detectives** – communicating clues |
|  | **Suggested thematic link.**  7 wonders of our school. | **Suggested thematic link.**  Researching the great fire of London. | **Suggested thematic link.**  Could the games they create link to their Science plants unit? | **Suggested thematic link.**  Can they explore animal games? - Science topic link. | **Suggested thematic link.**  Link to bugs found in that season. | **Suggested thematic link.**  When emailing, children send the emails to the explorers they are learning about in theme. |

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| Year 3 | **Online safety.**  Cyber bullying.  -Acceptable and unacceptable online behaviour. | **Online safety.**  Gaming safely online- -Acceptable and unacceptable online behaviour-cyber bulling  -Age limits of games  -Keeping safe from strangers.  -Reporting concerns to trusted adults. | **Online safety.**  Communicating safely online.  Types of communication online, gaming, emails etc.  What to do if concerned.  Digital footprint.  -If you wouldn’t say it in person…  -Strength of your online accounts. | **Online safety.**  Keeping personal information safe when filling out online surveys. | **Online safety.**  Keeping yourself safe when researching online.  -Sites to trust.  -Begin to explore how to recognise sites to trust.  -What to do with content don’t trust. | **Online safety.**  Using technology respectfully- Creating videos. E.g.  **-**Appropriate permissions.  -Permanence of videos online.  -Using videos responsibly  -Un/acceptable behaviours  -Privacy  -Impact of videos being available online. |
| **3.1 We are programmers - Programming an animation** | **3.2. We are bug fixers - Finding and correcting bugs in programs** | **3.5 We are communicators- Communicating safely on the internet.** | **3.6 We are opinion pollsters- Collecting and analysing data.** | **3.4: We are vloggers.** | **3.3. We are presenters - Videoing performance** |
|  | **Suggested thematic link.**  Animation based around Ancient Egypt characters and backgrounds. | **Suggested thematic link.**  Kagan group work. | **Suggested thematic link.**  Children linking emails and communication to the Stone Age. | **Suggested thematic link.**  Collect and present classes opinion/ surveys linked to the Bronze Age. | **Suggested thematic link.**  Children research and present about climate. Oracy links. | **Suggested thematic link.**  Link to their favourite skill learnt in PE during this term (athletics). |

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| Year 4 | **Online safety.**  Using the internet responsibly- copyright.  -E.g. link to music downloading legally. | **Online safety.**  Online gaming behaviour-  Build on Year 3 unit. --Acceptable and unacceptable online behaviour-cyber bulling  -Age limits of games  -Keeping safe from strangers- Increase knowledge of reporting concerns e.g. intro website owners.  -The consequences of what we say or do in online games. | **Online safety.**  Use of video technology.  Build on previous units.  -Focus on youtube.  -act responsible and respectfully.  -Permissions  -Sharing personal information online inc through videos.  -Age of sites e.g. youtube. | **Online safety.**  Risks of using the internet for research.  -How easy it is to create a website- How do we know when to trust them.  -Increase knowledge of ways to report sites/ content.  -Keeping safe when researching. | **Online safety.**  Reliability of online content.  -recognising reliable sites.  -reporting concerns.  -Conduct when working collaboratively online. | **Online safety.**  Cyber bullying.  -More detailed look e.g. Range of devices it could be used.  -Why it can be so damaging e.g. can never get away.  -What to do if someone upsets you online.  -(Un)acceptable behaviour. |
| **4.3 We are musicians** - Producing digital music | **4.1 We are software developers -** a simple educational game | **4.6We are meteorologists -** Presenting the weather | **4.5 We are co-authors -** Producing a wiki | **4.4 We are HTML editors** - Editing and writing HTML | **4.2 We are toy designers** - Prototyping an interactive toy |
|  | **Suggested thematic links.**  Create a piece of music to represent a natural disaster e.g. a volcanic eruption. | **Suggested thematic links.**  Create a game either with Roman character or a quiz about the Romans based on what they have learnt. | **Suggested thematic links.**  Link to water cycle and weather in theme. | **Suggested thematic links.**  Research animals found in the English focus text (Lion, W and the W). | **Suggested thematic links.**  Build up to creating their own web page on an aspect studied in our Americas topic. | **Suggested thematic links.**  Create a toy based on Victorian toys. |

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| Year 5 | **Online safety.**  Gaming safely online.  Build on Y3/4 units with age appropriate information.  -(Un)acceptable behaviours when playing online and communicating.  -Impact of our in game communication.  -Impact of our online behaviour e.g. friendships  -Dangers of gaming online. | **Online safety.**  Evaluating the quality and reliability of online information.  Build on Y4 unit.  -Copy right.  -Identifying high quality sources.  -Spotting fake information.  -Reporting concerns on content.  -spotting dangerous content. | **Online safety.**  Online presence.  -Your digital footprint.  -Actions have consequences online.  -Scenarios- Is this okay… why? | **Online safety.**  Keeping our information safe online.  -How to keep our accounts safe.  -Strong passwords  -Talking in code- how to report concerns.  -Increase knowledge of what to look out for and how to report.  -Looking out for other after our information.  -Spam/ dangerous communication. | **Online safety.**  Appropriately sharing information online.  -What, when and where is it okay to share?  -Who should(n’t) we share with.  -Reporting dangers.  -The impact of oversharing online. – Age appropriate more in-depth look at dangers. | **Online safety.**  Cyber bullying.  -Check understanding of core messages covered in previous year groups.  -Appropriate behaviour.  -Start to introduce case studies to look at impact of unacceptable behaviour. |
| **5.1 We are game developers -** Developing an interactive game | **5.3 We are artists** - Fusing geometry and art | **5.6 We are architects** - Creating a virtual space | **5.2 We are cryptographers** - Cracking codes | **5. 5 We are bloggers -** Sharing experiences and opinions | **5.4 We are web developers -** Creating a web page about cyber safety |
|  | **Suggested thematic link.**  Create a game around the theme of the space. | **Suggested thematic link.**  Art based around the geography focus. | **Suggested thematic link.**  Create model based on the homes from one of the historical periods studied. | **Suggested thematic link.**  Sending messages back home from holiday. What if we wanted to send a coded message? | **Suggested thematic link.**  Blog Arthur’s Point of view. | **Suggested thematic link.**  Change in technology over recent years has opened the door for new forms of buildings. |

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| Year 6 | **Online safety.**  Repercussions of cyber bulling.  -Both for the victim and the perpetrators.  -Case studies.  -Identifying cyber bulling.  -Range of devices used. | **Online safety.**  Gaming online safely  Building on Y5 unit.  -Age appropriate sites.  -Impact of negative communication online.  -Danger of strangers only met online.  -Behaviour in games and consequences of negative behaviour (for victims and perpetrators). | **Online safety.**  Use of GPS  -Dangers and benefits.  -Tagging locations.  -Appropriate settings on all devices.  -Sometimes can be helpful (find my phone, satnavs) but what are dangers? | **Online safety.**  Publishing videos.  **-**Danger of sharing videos, publishing videos on line.  -Who we shouldn’t share with and what we shouldn’t share.  -Age limits of site where they can share videos etc.  -Full range of who to contact if concern inc e.g. police. | **Online safety.**  Online security.  Consolidate understanding of the permanence of what we put online.  -telling whether a site is secure.  -How can our information we put online be used maliciously.  -Digital footprint. | **Online safety.**  Transition to secondary school.  -How can we keep ourselves safe when we transition to secondary school.  -Sharing of our information, e.g phone numbers, emails.  -What does this open us up to? Staying safe, only giving to trusted friends etc. |
| **6.1 We are adventure gamers.** – Making a text- based game. | **6.6 We are publishers**  Creating a magazine. | **6.5 We are travel writers-** Using media and mapping to document a trip. And  **6.3 We are advertisers.** Creating a short television advert. | | **6.4 We are network technicians**- Exploring computer networks including the internet. | **6.2 We are computational thinkers**- Mastering algorithms for searching, sorting and mathematics. |
|  | **Suggested thematic links.**  Create a game linked to themes studied in WW2 topic. | **Suggested thematic links.**  WW2 theme magazine. | **Suggested thematic links.**  Greece. –Video advert with media and mapping. | | **Suggested thematic links.**  How communication has changed over time and now computer networking is a very important part of our lives. | **Suggested thematic links.**  How computer programming jobs are increasing since the past. How will this affect our job choices in the future. Coding is a thing of the further. |