Crompton Primary School

Computing Curriculum

Years 1 - 6

Contents

Purpose of study

A high-quality computing education equips pupils to use computational thinking and creativity to understand and change the world. Computing has deep links with mathematics, science, and design and technology, and provides insights into both natural and artificial systems. The core of computing is computer science, in which pupils are taught the principles of information and computation, how digital systems work, and how to put this knowledge to use through programming. Building on this knowledge and understanding, pupils are equipped to use information technology to create programs, systems and a range of content. Computing also ensures that pupils become digitally literate – able to use, and express themselves and develop their ideas through, information and communication technology – at a level suitable for the future workplace and as active participants in a digital world.

Curriculum Overview

- **Computer Science (CS)**
  - Pupils are taught how digital systems work and how to put this knowledge to use, through programming.
  - can analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems
- **Information Technology (IT)**
  - Building on the knowledge and understanding of computer science, information technology gives pupils a chance to use programs and create contents that apply to other areas.
  - can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems
- **Digital Literacy (DL)**
  - Enabling pupils to use and express themselves and develop ideas through information and communication technology. Equipping pupils with skills that will transfer to the future workplace and enable them to be active participants in an increasingly digital world.
- **Online Safety (OS)**
  - Are responsible, competent, confident, safe and creative users of information and communication technology
- **Data Handling (DH)**
  - can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation

Subject Content

Key stage 1

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

Key stage 2

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

Online Safety should be integrated throughout the Computing curriculum. The ‘ ’ statements should be covered within lessons where appropriate and during school/national events such as Safer Internet Day (February) and Anti Bullying week (November).

Learning Overview

	Programming	Multimedia	Handling Data	Online safety
Year 1	**Eat, sleep code, repeat!** Jit5 Turtle Beebot Hour of Code	**Come write with me!** Jit5 Write MS Word Google Docs	**I spy with my little eye!** Cameras iPads jit5 pictograms	**Lee and Kim** Online safety
Year 2	**Eat, sleep code, repeat!** Hour of Code	**Create and Animate!** Jit5 animate PowerPoint Google Slides	**Lines, pies, charts, Oh my!** Jit5 Chart iPads PicCollage	**Hectors World** Online safety
Year 3	**Eat, sleep code, repeat!** Hour of Code	**Sketchers!** Sketches Pro, MS Word, Google Docs	**Bug Hunters** J2e Branch MS Excel iPads	**Captain Cara** Online safety
Year 4	**Eat, sleep code, repeat!** Hour of Code	**Vlogging!** Adobe Spark Video iMovie Screencastify Xbox game bar	**Top Trumps** J2e Data Microsoft word Google docs MS Excel Google sheets	**Net Safe Utah** Online safety
Year 5	**Scratch that Itch!** Hour of Code Scratch	**Augmented Reality** Aurasma Green Screen QR Codes MS Excel	**Let's have a party!** MS Excel Google sheets Google forms Google Sites	**Cyber Café** Online safety
Year 6	**Ahh snakes!** Scratch Hour of Python	**Move to that beat!** Garage Band Sonic Pi	**Get Online** Adoble Spark Page Google Sites	**Caught in the Web / Jigsaw video** Online safety

Units can be done in any order throughout the year and extend over a half term where necessary. Online safety needs to be revisited on a regular basis and integrated into learning, where possible i.e. passwords and personal information.

Units of work are split into four sections: programming, multimedia, handling data and e-safety. These units can be taught throughout the year and can cross over from one half term into the next. This is to allow you enough time to produce high quality learning.

If you complete all units of learning before the end of the year, any additional time can be spent recapping and the units you feel the children need the most.

Year 1

	Project Overview	Learning outcomes
Programming (CS, OS) Jit5 Turtle https://www.j2e.com/jit5#turtle BeeBot Hour of code	***Eat, sleep, code, repeat!*** Throughout this unit, children will develop their understanding of control, directional language and programming. They will begin using Jit5 Turtle, to allow them to understand the basics of coding and the appropriate language (algorithm, bug, debug, program.) Can use BeeBots to see the real-life application moving the Beebot around the classroom. The project will reinforce children's understanding that instructions need to be given in a correct order and children will be able to give instructions using directional language and numerical units. They will begin to understand the language associated with coding and use it appropriately. As they become more confident, they can begin to use Hour of Code. Allow children to work at their own pace.	○ give instructions to my friend and follow their instructions. ○ describe what happens when I press buttons on a robot/program. ○ press the buttons in the correct order to make my robot/program do what I want. ○ describe what actions I will need to do to make something happen and begin to use the word algorithm. ○ begin to predict what will happen for a short sequence of instructions. ○ begin to use software/apps to create movement and patterns on a screen. ○ use the word debug when I correct mistakes when I program. ○ keep my password private.
Multimedia (IT, DL) Jit5 Write https://www.j2e.com/jit5#write	***Come write with me!*** This unit will teach the children how to use simple text formatting tools, backgrounds, pictures and word banks to create a simple word-processed document using jit5 write. More able children can explore the use of Microsoft word and google docs tools. This unit can be adapted to complement the current class topic.	○ be creative with different technology tools. ○ use technology to create and present my ideas. ○ use the keyboard or a word bank on my device to enter text. ○ save information in a special place and retrieve it again. ○ use links to websites to find information

Handling data (IT, DH) Digital camera/ iPad camera iPad camera tools jit5 https://www.j2e.com/jit5#pictogram	***I spy with my little eye!*** This project will teach children about the main functions and buttons of a digital camera as well as about different shots so children can confidently capture their own shots using both a digital camera (if available) and the camera app on an iPad. How to print these documents and use in physical pictograms. Also, how to insert these photos and resize them on different programs. Finally, the children will use the photographs to create a physical pictogram and a digital pictogram using jit5.	○ talk about the different ways in which information can be shown. ○ use technology to collect information. ○ sort different kinds of information and present it to others. ○ add information to a pictograph and talk to you about what I have found out. ○ recognise the ways we use technology in our classroom. ○ recognise ways that technology is used in my home and community. ○ begin to identify some of the benefits of using technology.
Online Safety (DL, OS)	○ Discuss and define classroom rules / expectations about safe use of the Internet.	○ keep my password private. ○ tell you what personal information is. ○ tell an adult when I see something unexpected or worrying online.

Lee and Kim https://www.thinkuknow.co.uk/4_7/ http://locomotion.co.uk/portfolio/lee-kims-adventure-animal-magic-flash-animation-for-safer-internet-day/	○ Provide opportunities to discuss what personal information is and who you can tell it to. ○ Provide opportunities to log onto networks or school website and discuss keeping passwords private. ○ Reinforce the rule about keeping adults informed about Internet activity and telling if you see something you don't like. ○ Model making good choices about the websites you use, and how long to spend online. ○ Talk about the need for kind and polite communication in real life and online.	○ **talk about why it's important to be kind and polite.** ○ **recognise an age appropriate website.** ○ **agree and follow sensible e-Safety rules.**

Year 2

	Project Overview	Learning outcomes
Programming (CS, IT, OS) Hour of Code	***Eat, sleep, code, repeat!*** Children will have the opportunity to develop their understanding of computer programming further. They will be introduced to new coding language, including loops and events. Children will also be introduced to the concept of 'digital footprint' and the importance of keeping information safe online. Allow children to work at their own pace.	○ give instructions to my friend (using forward, backward and turn) and physically follow their instructions to move in a shape ○ tell you the order I need to do things to make something happen and talk about this as an algorithm. ○ program a robot or software to do a particular task. ○ look at my friend's program and tell you what will happen. ○ use programming software to make objects move. ○ watch a program execute and spot where it goes wrong so that debug it. ○ explain why I need to keep my password and personal information private. ○ talk about why it's important to be kind and polite online and in real life. ○ I know that not everyone is who they say they are on the internet. ○ talk about the differences between the Internet and things in the physical world.
Multimedia (IT, DL) Jit5 animate https://www.j2e.com/jit5#animate	***Create and Animate!*** Children will begin by creating a simple stop animation video using the jit5 animate tools. Once confident, they will then use stop motion studio to physically manipulate objects to create a stop motion video. Alongside this, children will begin to use presentation software (PowerPoint/Google Slides) to share their ideas and videos. Building their presenting and word processing skills throughout.	○ use technology to organise and present my ideas in different ways. ○ use the keyboard on my device to add, delete and space text for others to read. ○ tell you about an online tool that will help me to share my ideas with other people. ○ save and open files on the device I use. ○ use index fingers (left and right hand) on a keyboard to build words and sentences. ○ I know when and how to use the SPACE BAR (thumbs) to make spaces between words. ○ tell you why I use technology in my home and community. ○ I am starting to understand that other people have created the information I use.

Handling data (IT, DH, DL) Picollage https://www.j2e.com/jit5#chart	***Lines, pies, charts, Oh my!*** Children will be given the opportunity to collect data e.g. insects/vehicles. Information found is then collated together using Pic Collage and presented in groups. From here the data is then transferred onto a chart or graph. Children will have the opportunity to create the chart in various ways e.g. pie chart, line graph. Comparing and contrasting which works best for their data.	○ I talk about the different ways I use technology to collect information, including a camera, microscope or sound recorder. ○ make and save a chart or graph using the data I collect. ○ talk about the data that is shown in my chart or graph. ○ I am starting to understand a branching database. ○ tell you what kind of information I could use to help me investigate a question. ○ use technology to organise and present my ideas in different ways. ○ tell you about an online tool that will help me to share my ideas with other people. ○ identify benefits of using technology including finding information, creating and communicating. ○ tell you why I use technology in the classroom.
Online Safety (DL, OS)	○ Discuss and define classroom rules / expectations about safe use of the Internet.	○ explain why I need to keep my password and personal information private. ○ describe the things that happen online that I must tell an adult about. ○ talk about why I should go online for a short amount of time.

Hectors World https://www.esafety.gov.au/educators/classroom-resources/hectors-world/your-personal-information-online	○ Provide opportunities to discuss what personal information is and who you can tell it to. ○ Provide opportunities to log onto networks or school website and discuss keeping passwords private. ○ Reinforce the rule about keeping adults informed about Internet activity and telling if you see something you don't like. ○ Model making good choices about the websites you use, and how long to spend online. ○ Talk about the need for kind and polite communication in real life and online.	○ **talk about why it's important to be kind and polite online and in real life.** ○ **I know that not everyone is who they say they are on the internet.**

Year 3

	Project Overview	Learning outcomes
Programming (CS) Hour of Code	***Eat, sleep, code, repeat!*** This course will consolidate the children's knowledge of algorithms and debugging. They will also further develop the effective use of repeat loops using familiar games and characters. These skills will then be applied when the children make their first interactive game, using code. Allow children to work at their own pace.	○ plan and sequence instructions to achieve a specific outcome. ○ put programming commands into a sequence to make a model move. ○ I keep testing my program and can recognise when I need to debug it. ○ use repeat commands. ○ solve an open-ended problem such as building a simple game. ○ describe the algorithm I will need for a simple task. ○ detect a problem in an algorithm which could result in unsuccessful programming. ○ break an open-ended problem up in to smaller parts.
Multimedia (IT, DL) MS Word or google doc MS Powerpoint or Google Slides Sketches Pro	***Sketchers!*** This unit introduces Painting apps such as Sketches Pro & Microsoft Paint and presentation tools (PowerPoint/slides) to the children. They will create a piece of artwork, linked to their current topic after carrying out some internet research. This is then saved and inserted into a presentation. The children use correct typing skills to explain their thought process behind their picture.	○ create different effects with different technology tools. ○ combine a mixture of text, graphics and sound to share my ideas and learning. ○ use appropriate keyboard commands to amend text on my device, including making use of a spellchecker. ○ evaluate my work and improve its effectiveness. ○ use an appropriate tool to share my work online. ○ save and retrieve work on the Internet (Google drive), the school network or my own device. ○ describe the World Wide Web as the part of the Internet that contains websites. ○ use search tools to find and use an appropriate website. ○ I think about whether use images that I find online in my own work.

Handling data (IT, DH) Picollage https://www.j2e.com/jit5#chart MS Excel	***Bug Hunters*** Children will be given the opportunity to collect data e.g. insects/vehicles. Information found is then collated together using Pic Collage and presented in groups. From here the data is then transferred onto a chart or graph. Children will have the opportunity to create the chart in various ways e.g. pie chart, line graph. Comparing and contrasting which works best for their data. If confident using Jit5 Charts, then move onto presenting data using MS Excel.	○ talk about the different ways data can be organised. ○ search a ready-made database to answer questions. ○ collect data help me answer a question. ○ talk about the information collected. ○ add to a database ○ make a branching database.
E-Safety (DL, OS)	○ Discuss and agree classroom rules / expectations about safe use of the Internet. ○ Model how to protect personal information and how to choose a secure password.	○ talk about what makes a secure password and why they are important. ○ protect my personal information when I do different things online. ○ use the safety features of websites as well as reporting concerns to an adult. ○ recognise websites and games appropriate for my age. ○ make good choices about how long I spend online. ○ I ask an adult before downloading files and games from the Internet.

Captain Clara https://www.childnet.com/resources/the-adventures-of-kara-winston-and-the-smart-crew	○ Reinforce the rule about keeping adults informed about Internet activity and telling if you see something you don't like or if you feel you're being bullied. ○ Model how to choose age-appropriate websites and minimise risk of viruses ○ Provide opportunities to communicate and collaborate safely and respectfully with others online e.g. class blogging ○ Model how to provide appropriate responses to others' work e.g. a class blog	○ **post positive comments online.**

Year 4

	Project Overview	Learning outcomes
Programming (CS) Hour of code Course D	***Eat, sleep, code, repeat!*** The children will consolidate their prior learning of algorithms, repeat loops and debugging to create more complex programs. They will create procedures and games using conditionals and functions. Allow children to work at their own pace.	○ use logical thinking to solve an open-ended problem by breaking it up into smaller parts. ○ use efficient procedures to simplify a program. ○ I know that I need to keep testing my program while I am putting it together. ○ use a variety of tools to create a program. ○ recognise an error in a program and debug it. ○ I recognise that an algorithm will help me to sequence more complex programs. ○ I recognise that using algorithms will also help solve problems in other learning such as Maths, Science and Design and Technology.
Multimedia (IT, DL) Adobe Spark Video iMovie X Box gamebar QR Code creator	***Vlogging!*** Children will learn how to combine texts, sound, graphics and video to create a vlog based on a chosen theme. Using ipads to collect content (photos, video) they will then use Adobe Spark video/iMovie to work in groups or pairs to create their vlog. Depending on restrictions (parental consent etc) these videos can be uploaded to Google Classroom stream. QR codes can also be created as an alternative way to share videos. Once confident creating on iPads, can use the laptops to use the X Box gamebar to create similar versions on the laptops and then use the editing features on laptops to create vlogs.	○ use photos, video and sound to create an atmosphere when presenting to different audiences. ○ I am confident to explore new media to extend what achieve. ○ change the appearance of text to increase its effectiveness. ○ create, modify and present documents for a particular purpose. ○ use a keyboard confidently and make use of a spellchecker tor write and review my work. ○ use an appropriate tool to share my work and collaborate online. ○ give constructive feedback to my friends to help them improve their work and refine my own work ○ tell you whether a resource I am using is on the Internet, the school network or my own device. ○ identify key words to use when searching safely on the World Wide Web. ○ I think about the reliability of information I read on the World Wide Web. ○ tell you how to check who owns photos, text and clipart.

		○ create a hyperlink to a resource on the World Wide Web.
Handling data (IT, DH) MS Excel MS Word Google Slides Ms Publisher Sketches Pro iPad	***Top Trumps*** In this unit children will learn about the basic functions and purpose of databases. They will create their own class version of a Top Trumps game and use this to create a digital database. The content of this should be tailored to the class interest or current topics. Use MS Excel to import data collected and turn this data into different types of graphs before using MS word, MS Publisher, Google slides to create top trumps cards. Use sketches pro to create images for the cards and import them onto the chosen program to use as part of the cards.	○ organise data in different ways. ○ collect data and identify where it could be inaccurate. ○ choose the best way to present data to my friends.
Online Safety (DL, OS)		○ I choose a secure password when I am using a website.

Net Safe Utah website https://www.netsafeutah.org/parents/parent_videos.html	○ Discuss and agree classroom rules / expectations about safe use of the Internet. ○ Model how to protect personal information and how to choose a secure password. ○ Reinforce the rule about keeping adults informed about Internet activity and telling if you see something you don't like or if you feel you're being bullied. ○ Model how to choose age-appropriate websites and minimise risk of viruses ○ Provide opportunities to communicate and collaborate safely and respectfully with others online e.g. class blogging ○ Model how to provide appropriate responses to others' work e.g. through class blogs.	○ talk about the ways protect myself and my friends from harm online. ○ I use the safety features of websites as well as reporting concerns to an adult. ○ I know that anything I post online can be seen by others. ○ I choose websites and games that are appropriate for my age. ○ help my friends make good choices about the time they spend online. ○ talk about why I need to ask a trusted adult before downloading files and games from the Internet. ○ I comment positively and respectfully online.

Year 5

	Project Overview	Learning outcomes
Programming (CS) Hour of Code Scratch	***Scratch that itch*** The children will consolidate their prior learning of algorithms, repeat loops and debugging to create more complex programs. Once confident, children will move onto more complex coding found on Scratch Children will be introduced to a piece of coding software called Scratch. All the skills that they have used in previous years will be applied: including looping and conditionals. They will be guided through using a tick sheet, taking a much more independent approach; the teacher being a facilitator and encouraging independent/group debugging and problem solving. Experts could even have a go at designing their own Scratch game! Allow children to work at their own pace. Encourage independence and resilience.	○ use a variable to increase programming possibilities. ○ change an input to a program to achieve a different output. ○ use 'if' and 'then' commands to select an action. ○ use logical reasoning to detect and debug mistakes in a program. ○ I use logical thinking, imagination and creativity to extend a program. ○ design an algorithm for a specific outcome and use this to write a program for an onscreen activity

Multimedia (IT, DL. DH) Aurasma QR code creator Greenscreen Stop motion MS Excel	***Augmented Reality*** The aim of this project is to introduce the children to Augmented Reality (AR). It will incorporate the use of QR codes then onto more complex AR. The children will also learn to find images using the web and refine their research skills. Later in the project the children will be using their Greenscreen skills (from Year 4) where they create a piece of artwork then bring it to life by telling the story behind it. Incorporate skills of stop motion onto a green screen to bring stories to life. Children are given an understanding of spreadsheets and how they can be used. Throughout the learning a different spreadsheet template is provided in which children learn skills in formatting and entering specific formulas (addition, percentages etc.). Develop skills further to include investigative skills in using the spreadsheet to solve specific problems. Examples include number calculations, sports league tables, test scores, and budget planning.	○ Select an appropriate ICT or online tool to create and share ideas. ○ Explore the effects of multimedia (photos, video, sound) in a presentation or video and show how they can be modified. ○ Develop skills using transitions and hyperlinks to enhance the stricture of presentations. ○ Use a wide range of effects in art programs and online tools, discussing the choices made and their effectiveness. ○ Know how to use text and video editing tools in programs to refine their work. ○ Use online tools to create and share presentations and films. ○ I recognise the World Wide Web as part of the Internet and the ways connect to the Internet. ○ I understand that content online should not be downloaded or adapted without permission and acknowledgement. ○ I understand the different purposes for selecting tools to communicate and collaborate online. ○ I use appropriate tools for communication and collaboration and use them responsibly. ○ I use effective strategies to search with appropriate search engines. ○ use a spreadsheet to collect and record data. ○ choose an appropriate tool to help me collect data.
Handling data (IT, DH)	***Lets have a party!*** This unit opens up the world of website design. They will use Google Sites to create a website this could be link to the current theme or topic. Children to learn the basics of how to pout together a website.	○ use a spreadsheet to collect and record data. ○ choose an appropriate tool to help me collect data. ○ present data in an appropriate way. ○ talk about mistakes in data and suggest how it could be checked.

Excel Google sheets Google sites	This is a great cross curricular link to English or a current topic and can be adapted easily. Or, even an ongoing blog about their learning successes throughout the year. Allow for an open-ended task for pupils to design their own spreadsheet, with ideas and direction provided for purposes. Use the spreadsheets created to import and create graphs.	
E-Safety (DL, OS) Cyber Café https://www.thinkuknow.co.uk/8_10/	○ Provide opportunities to discuss and agree classroom rules / expectations about safe use of the Internet. ○ Model how to protect personal information through secure passwords and making good choices about sharing information. ○ Provide opportunities to discuss what is an appropriate amount of time to spend online ○ Talk about how to protect themselves and devices from inappropriate content/conduct and virus threats ○ Model how to report concerns e.g. telling an adult, using Report Abuse button. ○ Model the use of appropriate tools to communicate with others in a safe, responsible and respectful way.	○ I describe how search results are selected and ranked. ○ I protect my password and other personal information. ○ explain why I need to protect myself and my friends and the best ways to do this, including reporting concerns to an adult. ○ I know that anything I post online can be seen, used and may affect others. ○ talk about the dangers of spending too long online or playing a game. ○ explain the importance of communicating kindly and respectfully. ○ discuss the importance of choosing an age-appropriate website or game. ○ explain why I need to protect my computer or device from harm.

Year 6

	Project Overview	Learning outcomes
Programming (CS) Scratch https://hourofpython.com/	***Scratch that itch!*** Children will be reintroduced to Scratch. All the skills that they have used in previous years will be applied: including looping and conditionals. They will be taking a much more independent approach using their skills from the end of year 5; the teacher being a facilitator and encouraging independent/group debugging and problem solving. Once children are confident, move onto Python. ***Snakes on a plane!*** Children will be introduced to a more traditional way of coding, using words. They will use a type of code called Python. The children will learn to use code to share things about themselves. Along the way, understanding the importance of being precise and checking code as you go along. Python requires a much deeper understanding of code than Scratch, moving from blocks to writing in python code.	○ refine a procedure using repeat commands. ○ talk about how procedures improve programs. ○ deconstruct a problem into smaller steps, recognising similarities to solutions used before. ○ explain and program each of the steps in my algorithm for a device or onscreen activity. ○ evaluate the effectiveness and efficiency of my algorithm while I continually test the programming of that algorithm. ○ recognise when I need to use a variable to achieve a required output. ○ use a variable and operators to stop a program. ○ use different inputs to control a device or onscreen action and predict what will happen. ○ link errors in a program to a problem in the algorithm on which it is based. ○ talk about how a computer model can provide information about a physical system.
Multimedia (IT, DL)	***Sonic Boom!*** This is a creative project where children will use code to create music. They will use a piece of software called Sonic Pi where music can be created using lines of code. The children will create a piece of music then present it to the rest of their class. Music can then be imported into videos created by the children about specific topics.	○ talk about audience, atmosphere and structure when planning a particular outcome. ○ confidently identify the potential of unfamiliar technology to increase my creativity. ○ combine a range of media, recognising the contribution of each to achieve a particular outcome. ○ tell you why I select a particular online tool for a specific purpose. ○ be digitally discerning when evaluating the effectiveness of my own work and the work of others.

Sonic Pi		
Technology in our lives (DL, IT, DH) Google Sites	***Get online!*** This unit continues the use of website design. They will use Google Sites to create a website this could be for a local business, group or something of their own creation! This is a great cross curricular link to English or a current topic and can be adapted easily. Or, even an ongoing blog about their learning successes throughout the year. All skills from school life can be incorporated into this website. Data handling, vlogs, music etc. Encourage independence and creativity.	○ I describe different services provided by the Internet and how information moves around the Internet. ○ I connect a computer to a keyboard, mouse or printer. ○ I use search engines as part of an effective research strategy. ○ I recognise my responsibility to check copyright and acknowledge where content comes from. ○ I find out who the information presented on a webpage belongs to. ○ I understand appropriate communication for different audiences. ○ choose an appropriate tool to help me collect data. ○ present data in an appropriate way. ○ talk about mistakes in data and suggest how it could be checked.
E-Safety (DL, OS)		○ I protect my password and other personal information. ○ explain the consequences of sharing too much about myself online.

Caught in the Web video https://www.bbc.co.uk/newsround/13908828 Jigsaw	○ Provide opportunities to discuss and agree classroom rules / expectations about safe use of the Internet. ○ Model how to protect personal information through secure passwords and making good choices about sharing information. ○ Provide opportunities to discuss what is an appropriate amount of time to spend online ○ Talk about how to protect themselves and devices from inappropriate content/conduct and virus threats, ○ Model how to report concerns e.g. telling an adult, using Report Abuse button. ○ Model the use of appropriate tools to communicate with others in a safe, responsible and respectful way.	○ **I support my friends to protect themselves and make good choices online, including reporting concerns to an adult.** ○ **explain the consequences of spending too much time online or on a game.** ○ **explain the consequences to myself and others of not communicating kindly and respectfully.** ○ **I protect my computer or device from harm on the Internet**