Year 1

	Objectives/'I can' statements	Planning
Autumn 1: We are treasure hunters	**Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions.** I understand that a programmable toy can be controlled by inputting a sequences of instructions. I can develop and record sequences of instructions as an algorithm. I can create and debug simple programs. I can plan a journey for a programmable toy. I can predict how my programs will work.	FriendBot: Go into the playground and give each other instructions (an introduction to programming). Lego builders/Building bricks: take step-by-step photos of your Lego building and record instructions. Partner to build the same shape. Treasure Map – input set of instructions to reach the tr easure at the end of the map. Design a programmable toy (Toys topic link) – discuss the differences between old toys and your modern programmable toy. **Apps:** Lightbot app, Daisy the Dinosaur (coding). **Purple Mash link:** **http://www.purplemash.com/#tools/2go**
Autumn 2: We are TV chefs	I can break down a process into simple, clear steps, as in an algorithm. I can use different features of a video camera. I can use a video camera to capture moving images.	Literacy link: Film the steps for a recipe – plan and record own tv cooking show. **Software:** Microsoft paint, Microsoft Windows Live Movie Maker **Apps:** Brushes, iMovie Unplugged lessons to consolidate understanding of algorithms (in case of IT issues): https://www.csunplugged.org/en/ https://www.barefootcomputing.org/resources/abstraction-unplugged-activity
Spring 1: We are collectors	I can find and use pictures on the web. I know what to do if I encounter pictures that cause concern (E-Safety).	Sorting animals based on habitats, animal groups and diet (Science link). Present these images on keynote.

	I can group images on the basis of a binary (yes/no) question. I can organise images into more than two groups based on clear rules. I can answer (yes/no) questions about my images.	Sorting images of different types of flights (Topic: History link). **Software:** Web browser, Microsoft PowerPoint. **Apps**: Keynote **Purple Mash link:** **http://www.purplemash.co.uk/#pup/imagesearch** **http://www.purplemash.co.uk/#pup/internetresearch**
Spring 2: **We are celebrating**	**Use technology purposefully to create, organise, store, manipulate and retrieve digital content.** I can develop basic keyboard skills through typing and formatting text. I can develop basic mouse skills. I can use the web to find and select images. I can store and retrieve files. I can develop skills in combining text and images.	**Software:** Microsoft PowerPoint/Microsoft Word/Clicker 6*, Microsoft Paint/ 2Paint a picture: http://www.purplemash.com/#tools/2paint / Pic Collage **Apps:** Pages, Keyn ote, iMovie, iMotion, Lego Movie Maker This could be adapted to focus on Easter. - Create digital cards for Christmas (RE link) - Cards for different celebrations - Create a stop motion animation to tell the Nativity story. - Create an interactive Christmas scene link using the Chatterpix Kids app and linking different parts using Thinglink.
Summer 1: **We are storytellers**	I can recognise common use of I.T beyond school. I can use technology purposefully to create, organise, store, manipulate and retrieve digital content. I can use a camera. I can use a website. I can record sound and play back. I can develop skills in saving and storing sounds on the computer.	Record documentary/tv report (Geography link: Hot/cold deserts). **Story Creating Apps:** 2-create story http://www.purplemash.com/#tools/2cas /Toontastic/Storybird/Book Creator Free/Our Story/Puppet Pals. Create a stop motion animation for book used in Literacy using props and puppets made by children – iMovie/Stop Motion Studio:

		Record (take photos/record voice/video) a sensory version of a story e.g. We're going on a Bear Hunt.
		Produce illustrations for a book digitally.
		Create a story scene using *Jit5Paint.* The children can choose a background image and ready-made characters/pictures to add to their scene. They also have the option to paint their own additions.
		Music link: Create a talking book – use instruments to record different sound effects and add these to PowerPoint to tell a story.
Summer 2: **We are painters**	I can select & use appropriate painting tools to create and change images on the computer. I understand how this use of ICT differs from using paint and paper. I can create an illustration for a particular purpose. I know how to save, retrieve and change my work; and reflect on work and act on feedback given.	- Create a digital piece of art work inspired by a Hackney artist (Topic Link). - Use the flyover feature on Apple Maps to tour Hackney and illustrate fact book about Hackney (Topic link) - Illustrate an Ebook (Literacy link) - http://www.purplemash.com/#tools/2cas Software: Microsoft Paint/2Simple 2Paint a Picture, IXW software, Microsoft Word, Microsoft Powerpoint **Apps**: Brushes, Sketchbook Express, My Story Book Maker, Toontastic, Paper by WeTransfer **Purple Mash link:** **http://www.purplemash.com/#tools/2paint**

Year 2

	Objectives/'I can' statements	Planning
Autumn 1: **We are astronauts**	***Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise instructions.*** I understand that programs require precise instructions called algorithms. I can predict what a simple program will do. I can find errors and fix them (debug).	Programming focus: Aim is to programme a space shuttle to move around the screen on Scratch. Children should explore Scratch before completing this as a final project. **Lesson Ideas:** **http://stannesrc.weebly.com/uploads/1/1/2/6/11269068/unit_2.5_tn.pdf** Role Play: Children could help to create a space shuttle role-play area, with a range of defunct and pretend technology to communicate with mission control and to control the movement of the shuttle. This could include a computer playing audio and video clips of space travel, in particular of the first moon landing. Programmable toys could be used as moon buggies to explore the surface of the moon. Literacy: Children could write creatively about what it might be like to travel in space, or about a time in the future when everyone travels from planet to planet. **Software**: Scratch, Kodu, Scratch Jr **Apps:** Hopscotch, Daisy the Dinosaur, Pyonkee

Autumn 2: **We are Game Testers**	I can describe carefully what happens in computer games. I can use logical reasoning to make predictions of what a program will do.	Children play and examine different games on Scratch. They try to predict what the code is and the planning behind it. The children evaluate the game e.g., https://scratch.mit.edu/projects/15905989/ , they decide what is good about the game and what could be better. This unit should be all about exploring coding games and apps such as Scratch and how they work to build up to using Scratch in Y3.
Spring 1: **We are Zoologists.**	I can sort and classify a group of items by answering questions. I can collect data using tick charts or tally charts. I can use simple charting software to produce pictograms and other basic charts. I can edit photographs. I can record information on a digital map.	**Science link**: Living Things & Their Habitats: - Collect data about minibeasts in the local environment – transfer data into a simple chart using 2Simple software/numbers app. - Research facts and information about minibeasts/living things and use Shadow Puppets Edu app to present the information. - Sort/classify animals based on habitats, animal groups and diet - present these images on keynote. - Create a custom map on Google maps to show information about the location, habitat and data for minibeasts. **Software:** Web browser, Microsoft Powerpoint, Google Photos **Apps**: Keynote, Snapseed, Numbers
Spring 2: **We are world explorers**	I understand that email can be used to communicate. I can open, compose and send emails. I can use appropriate language/features in an email. I can edit font and format text in emails.	Topic Link/Literacy Link: Penpal activity: Write an email to a e-pal (penpal) in another part of the UK or contrasting city in the world. Children should develop skills of adding video links or audio to these emails before sending them to an email address created for this purpose. Children should discuss features of an email, similar to letter writing. Other ideas linking Computing to topic: - Present news from different parts of the UK/World. Children to gather information about landmarks and important features of different

	I am aware of e-safety issues when opening and sending emails.	cities/countries. Record using iMovie, edit and publish on a platform e.g. Class DoJo.
Summer 1: **We are researchers**	I can navigate the web to complete a simple search. I can develop research skills through searching for information on the internet. I can collect and record information gathered through my internet search by taking notes and creating mind maps. I can present my findings through a multimedia presentation/digitally.	Adapt to create a research project for Summer 1 topic Mary Seacole & Florence Nightingale Topic link: - Research the key events in the lives of these historical figures. Create a mind map collaboratively to record facts gathered from reading. Use Keynote app or PowerPoint presentation to present findings to another class. - Create a video using facts from internet search, recording voice overs. - Create a stop motion animation going through a timeline of events for both women. Example: https://www.youtube.com/watch?v=MgmJ2ebVmPY&ab_channel=aem306 - Above could be repeated for Science topic.
Summer 2: **We are photographers.**	I can use a digital camera or camera app. I can discuss the technical and artistic features of photographs (brightness, red eyes, clarity, background, contrast). I can review, compare and rate the technical and artistic features of photographs I take. I can edit and enhance my photographs.	**Photostory 3 -** *Combines photos into a slideshow and allows sound, voice commentary and titles to be added.* **JiT J2e infant tools – animate.** *The children can create a progression of images to animate a character of their choice. There are also options to add text and background images.* Apps: Pixlr, iPhoto, Snapseed Adapt to chosen topic - children create an animation sequencing events (choose a historical event or a story related to link).

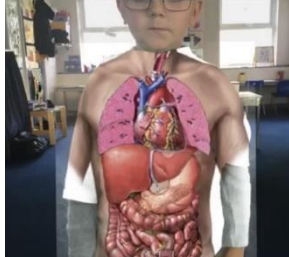|		
	I can select my best image out of a selection of photographs to share with others.	Project 2: Children create a slideshow using photos they have collected on the web or taken by them to present to the class. Challenge children by asking them to add voice overs and audio effects to their presentations. Great Fire of London topic link: 1. Children collect photos of London landmarks in the 17th century and now. They use Photostory 3 to combine photos into a slideshow and add a voiceover to create their own guided tour. 2. Create an animation sequencing events of the Great Fire of London with key dates and key names (Jit/J2e Animate / iMotion / iMovie / Stop Motion Studio*
KS1 E-Safety (throughout the year)	I can use technology safely and respectfully. I can keep personal information private. I can identify where to go for help and support when I have concerns about content or contact on the internet or other online technologies.	Visit the NSPCC for advice: https://www.nspcc.org.uk/keeping-children-safe/online-safety/ Ensure children understand that you cannot trust/believe all content on the internet. Search for Spoof or Fake websites e.g. https://zapatopi.net/treeoctopus/ Read online safety stories: **Chicken clicking, Once upon a time online, Digidi ducks big decision, Smartie the penguin (e-book), penguin pig.** Resources: https://kentesafety.wordpress.com/2015/06/05/online-safety-storybooks/

Year 3

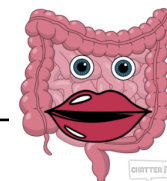|	Objectives/'I can' statements	Planning

Autumn 1: **We are bug fixers**	I can use my problem-solving skills to find errors in programs. I can develop my understanding of using Scratch. I can work with different forms of simple, common errors.	Complete debug challenges on 2Code: http://www.purplemash.com/app/code/openended/freecodegibbon Debugging Scratch games: http://scratch.mit.edu/projects/11932181 http://scratch.mit.edu/projects/11932160 http://scratch.mit.edu/projects/11932410
Autumn 2: **We are film directors.**	I can design and create content. I can use a range of technology for a specific project.	**Ancient Egypt Topic Link:** - Create a YouTube style video about mummification to assess understanding of the process. - Create freeze frames for key events/moments of Cleopatra's life. Take photographs to create a series of pictures retelling her story. - Record a greenscreen film/documentary reporting on tomb discoveries. - Explore selling Egyptian artefacts. Children can plan, write and record their own advert (Horrible Histories style). - Ancient Egypt VR Workshop. **Light – Science Link:** - Explore different sources of light in school and create a digital collage. - Create and record shadow puppet theatre show. - Design, create and record a video tutorial explaining step-by-step how to create your own periscope.

Spring 1: **We are presenters**	I can present information digitally. I can hold the camera steady and review shots. I can manipulate and improve digital images. I can use a range of software to present information. I can start to develop skills in editing, narrating and reviewing important qualities of a video (perspective, narrative, scene length).	Planning ideas adapted to cover objectives with a link to Spring 1 topic. For example; Create an animation of how magnets attract or repel each other. This could be created on 2animate on Purple Mash. **Stone Age/Bronze Age Topic Link:** - Create a 360 stone age timeline using **Keynote** app. Timelines can be animated, made interactive and can be posted as 360 degree video. - Evolution of man reports: Interview the different stages of man from different ages. Record interviews and create a documentary using the greenscreen tool on **iMovie** to create backgrounds/settings for the different ages. - Record a persuasive advert to sell a Neolithic house/Stone Age property. - Recreate Stonehenge using **Minecraft** game.
Spring 2: **We are opinion pollsters.**	I can collect information. I can use a data collection software. I can understand some ethical and legal aspects of online data collection. I can gain skills in using charts to analyse data. I can gain skills in interpreting results.	Collecting and Analysing Data – Maths link Children choose a question to investigate e.g., *How many times do you have a school lunch?* or *'What do you like about the school grounds?' (local area investigation).* The children design surveys to find out what other people think of a particular topic. Plan on paper first. Explore using Google Forms and yes/no questions. Children should then put their data into 2Graph/2Investigate to analyse results. It is important to have discussions about collecting data e.g., anonymity, no leading questions (asking what you need to know). **Software:**

		2Graph http://www.purplemash.com/#jsapps/graph
		2Investigate http://www.purplemash.com/#tools/2inv
Summer 1 & Summer 2: **We are Programmers.**	I can write programs that accomplish specific goals. I can design a sequence of instructions, including directional languages. I can plan an animated scene in the form of a storyboard. I can use my storyboard to create an algorithm for an animated scene. I can use Scratch/Tynker to create the animation. I can use 2Publish to create a storyboard for an animation. I can debug errors in my animation.	**Mountains & Volcanoes Topic link**: Use ordnance maps to create a treasure hunt, children can use map clues to program their BeeBots to find the treasure hidden up a mountain or a famous volcano. **Rocks & Soils Science link:** Use Tynker app/software to create animations. Plan an animation based on Mary Anning's discovery of the Ichthyosaur fossil in 1810. Use 2Publish extra to create a storyboard about the discovery of fossils: http://www.purplemash.com/#tools/2pubExtra Summer 2: Scratch/Tynker Project: Create an animation or game based on a choice of topic from Literacy, Science or Topic.

Year 4

	Objectives/'I can' statements	Planning
Autumn 1:	I can develop a simple educational computer game using selection and repetition.	**The Romans** topic link:

We are Software Developers.	I can experiment with variables to control models. I can debug my computer program. I can give an on-screen robot specific instructions that takes them from A to B.	Use programming software (Scratch) to design an obstacle course for a roman gladiator character. Design a Roman city (you could possibly use Minecraft or the Minecraft style of drawing to help you).
Autumn 2: **We are Toy Designers**	I can design and make an on-screen prototype of a computer-controlled toy. I understand different forms of input and output (sensors, switches, motors, lights). I can design, write and debug the control and monitoring program for my toy.	Design an on-screen toy using Scratch. You can bring alive a character from a story, animals or completely made up toys. **Topic/Literacy link** (not directly linked to Computing unit) Create video similar to the Horrible Histories News Reports. Children can script and then perform their own Sky Sports Style reports on the events inside the Colosseum. Use **Mozaik3D** app to take you to Ancient Rome.
Spring 1: **We are Co-Authors**	I understand conventions for collaborative online work, particularly in wikis. I am aware of my responsibilities when editing other people's work. I can use a variety of software (including internet services) to create content. I can present information digitally and collaboratively.	**The Digestive System Project – Science Link:** Use Google expedition (AR) to explore the digestive system. Use Chatterpix Kids app to create animations to explain the functions of different parts of the digestive system/different types of teeth. *Use Green Screen by Do Ink to take photographs, the app creates an X-ray model of the digestive system, making it look like we could see inside the bodies of the children. Use these photographs to label adding voice notes for different organs. This work could then be uploaded onto Class Wiki/Class DoJo page as a whole class project.

		Additional Project - Eweka Topic/Literacy Link: Children plan their writing by imagining that they are going through a portal which takes them to Benin city. They write a script describing what they see when they enter Benin city through a portal and what life was like in the Ancient Kingdom of Benin. Children to create a video using their scripts. Use Figment AR app to place a digital portal on screen.
Spring 2: **We are Robotics designers.**	I know how electrical circuits and components can be used to create functional products. I can work with two inputs and one output (circuit). I can assemble materials and components with accuracy. I can evaluate the quality of the design for the purpose it was planned for when designing and making.	**Electricity** Make LED light-up greeting card – linking DT, Science and Computing. Children design cards that light up by creating circuits using copper tape, coin-cell batteries, paper clips and LED lights. Design and make a ScribbleBot using batteries, a DC motor and recyclable materials. Additional Activity: Interview Thomas Edison about the history of electricity. Present on iMovie.
Summer 1: **We are Musicians**	I can use a digital program to edit music. I can create and develop a musical composition, refining my ideas through reflection and discussion. I can develop collaborative skills.	Explore different apps/software to produce digital music. The music could link to other subject areas or children can choose any type of music. GarageBand: Lesson 1: learn how to use different features on the app. Lesson 2: Create music against a specific brief/simple criteria. Children should listen carefully, evaluate and edit music. Lesson 3: Use sequence, selection and repetition. Lesson 4: Children peer assess compositions and improve them.

		Software: Isle, Audacity, LMMS/GarageBand, MuseScore (optional) Apps: Isle of Tune, GarageBand
Summer 2: **We are Meteorologists.**	I understand the different measurement techniques for weather, both analogue and digital. I can use computer-based data logging to automate the recording of some weather data. I can use spreadsheets to create charts. I can analyse data, explore inconsistencies in data and make predictions. I can practise using presentation software and optionally, video.	**Rivers (States of matter)** ● Children research and discuss different measurement techniques for weather. ● Children collect data on the highest temperatures of the month in the local area. ● Explore and use Microsoft Excel to enter data – children create charts and present these in a video or PowerPoint presentation to their peers. **Additional Project:** Create a stop motion animation to explain particles in each state of matter.

Year 5

	Objectives/'I can' statements	Planning
Autumn 1: **We are Game Developers.**	I can design and create a computer program for a computer game, which uses sequence, selection, repetition and variables.	Children to plan, design, create and debug maze games on Scratch. Pupils will need a few lessons to revisit Scratch features and to develop ideas on creating a sprite (character) and using different variables.

	I can detect errors and correct errors in my computer game. I can make and test small changes to improve my game.	Children should practise creating backgrounds, sprites, sound effects, backing music and dialogue for their game. *For example: Code a game where the player must navigate their way across the North Sea.* The game could be linked to topics/science – however, would be good to see children come up with ideas for their games from scratch. Additional Programming Lesson Ideas: - Build a 3D Anglo Saxon Village on Minecraft. - Create Anglo Saxon patterns using Logo software.
Autumn 2: **We are Bloggers**	I can become familiar with blogs as a medium and genre of writing. I can create a sequence of blog posts on a theme. I can incorporate additional media. I can comment on the posts of others. I can develop a critical, reflective view of a range of media, including text.	**Create a class blog.** Throughout this unit of work the children can research a number of different blogging sites and become familiar with blogging as a medium and genre of writing. They then create a sequence of blog posts on a theme, incorporating different media and then comments on the posts of others (comments monitored by teachers before being published). They should be encouraged to develop a critical reflective view of a range of media including text. Themes and contents can be decided by class teachers – can be used for publishing, writing and conducting peer assessment. **Internet Safety:** Discuss that you must think carefully about what can be appropriately shared online. Children should also be reminded of what constitutes acceptable behaviour when commenting on others' blog posts.
Spring 1: **We are Engineers**	I can use logical reasoning to solve problems and model situations and processes.	STEM Link (Forces, DT) – Making a marble run. Lesson Hooks to understand forces and machines – link to how computers work:

	I can predict what will happen when variable and rules within a model are changed. I can demonstrate knowledge and understanding of computer systems. I can complete a branching activity where changing an element in the run can cause the marbles to change track.	https://www.youtube.com/watch?v=Z57kGB-mI54&ab_channel=HondaSuisse https://www.youtube.com/watch?v=GOMIBdM6N7Q&ab_channel=Joseph%27sMachines Make a marble run guides: https://www.edenproject.com/learn/for-everyone/how-to-make-a-recycled-marble-run https://nelson.newham.sch.uk/wp-content/uploads/2020/05/Marble-run-wb-11.5.20.pdf https://www.stem.org.uk/sites/default/files/pages/downloads/Worksheet-forces-marble-runs-ks2.pdf https://www.gshpa.org/content/dam/girlscouts-gshpa/documents/girl-scouts-at-home/just-for-fun-activities/Marble%20Run.pdf https://docs.google.com/document/d/1gLk1y6T_LG6_hpDdzOve9uGDRNoyeGw5GPXen4wP6bs/edit
Spring 2: **We are Astronomers**	I can design a simulation to simulate physical systems. I can write a simulation program. I can debug a simulation to accomplish a specific goal.	W
Summer 1: **We are Architects**	I understand the work of architects, designers and engineers working in 3D. I can develop familiarity with a simple CAD (computer aided design) tool.	**Project:** Design and create a virtual art gallery in which to display their artwork.

	I can develop spatial awareness by exploring and experimenting with a 3D virtual environment. I can develop greater aesthetic awareness.	**Lesson 1:** Explore virtual galleries + ask pupils to sketch a few initial design ideas for their virtual gallery on paper or build models from construction materials. Virtual tours: 360 tour of Tate Modern | Tate The National Gallery, London, United Kingdom — Google Arts & Culture Contemporary art gallery buildings: Art Gallery Architecture - Art Galleries - e-architect (e-architect.com) **Lesson 2:** - Demonstrate how to navigate the 3D environment using the orbit, pan and zoom tools on the standard toolbar. - Show how to bring up the large tool set and demonstrate the walk and look around tools. Encourage pupils to experiment with these further themselves. - Demonstrate how to draw 2D shapes and extrude these into 3D. Encourage the pupils to experiment with this and share their discoveries with one another. - Show how to select objects, faces and edges. - Show how each of these can be moved and encourage the pupils to experiment with these techniques further. **Lesson 3:** Children concentrate on the main room of the gallery, adding other rooms if time permits. Ask pupils to sketch out a ground plan for their gallery in SketchUp. The pupils should then add individual walls to the gallery, and they should create gaps in the walls for doors and, if they wish, windows.

		Use this guide on how to make a house on Sketch Up to explore the different tools you will use to build your art gallery: https://www.youtube.com/watch?v=gsfH_cyXa1o&ab_channel=SketchUp – tutorial https://3dwarehouse.sketchup.com/search/?q=art%20gallery&searchTab=model&domain=Architecture – art gallery examples on 3D Warehouse/Sketch Up ***Software:*** ● Trimble SketchUp Make (free software): www.sketchup.com/download
Summer 2: **We are Artists**	I can develop an understanding of the links between geometry and art. I can experiment with the tools and techniques of a Vector graphics package. I can develop an understanding of turtle graphics. I can develop some awareness of computer-generated art, in particular fractal-based landscapes.	Fusing Geometry & Art Children create tessellations/patterns using different software: Scratch, Logo. Explore with basic shapes first and gradually increase level of challenge. https://www.youtube.com/watch?v=G716PjGscug&ab_channel=GlennMalcolm https://www.youtube.com/watch?v=HABpFiGha5U&ab_channel=OrchidseLearning http://www.shodor.org/interactivate/activities/Tessellate/

Year 6

	Objectives/'I can' statements	Planning
Autumn 1: **We are Adventure Gamers.**	I can learn the syntax of a text-based programming language. I can use commands to display text on screen, accept typed user input, store and retrieve using variables and select from a list. I can plan a text-based adventure with 'multiple rooms' and user interaction. I can thoroughly debug the program.	**Create a text-based adventure game** Use Scratch or Python to plan and program a text-based adventure game. The game should tell a story as the key focus is using text-based programming. https://www.stem.org.uk/resources/community/collection/364674/ks2-programming-and-development
Autumn 2: **We are Project Managers**	I can develop an awareness of the capabilities of smartphone and tablets. I understand geolocation, including GPS. I can evaluate competing products. I can pitch a proposal for a smartphone or tablet app. I can scope a project to identify different components that must be successfully combined. I can identify my existing talents and plan how I can develop further knowledge and skills.	**Developing Project Management Skills** Children work in groups to think of some problems young people encounter. They will come up with ideas to help them design an app to solve these problems/issues. Allow children to brainstorm the types of apps they might find useful on a phone/tablet and will help support them as young people. This planning will later be used to plan and develop an app. e.g. -SATs help - A reminder app reminding you to get up and have a break when revising/studying. - Information/advice app before starting secondary school. Hook/WOW introduction – watch clips of the apprentice where they pitch proposals (age appropriate clips).

	I can identify the component tasks of a project and develop a timeline to track progress. I can identify the resources I will need to accomplish a project.	Use iPads to research the capabilities of smart phones and the different types/brands of smartphones available. Children to research questions such as: What is a smartphone? What can a smartphone do? How effective is it? What are the reviews like? What common problems can a smartphone or tablet app solve? Record research in writing. **Additional Project – Science Link (Electricity)** Creating a traffic light control simulation/electrical circuit simulation on Flowol software: I can use simple code language to give specific commands. I can make predictions when creating sequences of commands. I can create and test my own algorithm to control elements on screen. I can create and test my own algorithm to control interface hardware. (eg, a bulb, buzzer or motor). I can 'debug' (fix/change) a simple algorithm so that it is more effective.
Spring 1: **We are Market Researchers**	I can create a set of good survey questions. I can analyse the data obtained from a survey. I can work collaboratively to plan questions. I can conduct an interview or focus group. I can analyse and interpret the information obtained from interviews or a focus group.	**Researching the app market** Pupils use search engines safely and effectively to find out more about apps that are available and the journey of smartphones and tablet applications from the past. Pupils will then create a survey of questions to collect information about preferred apps e.g., social + networking, personal well being, organisation. Children then present their findings and decide on the type of apps they will build. **Extension** Design home screen logo, pages, information and content for an app serving young people. Choose one of the above themes. A prototype can be designed using physical materials and pupils can be challenged to design a digital prototype in JustinMind prototype software or apps: Sketchypad/iMockups.

	I can present my research findings.	
Spring 2: **SATs** **preparation**		
Summer 1: **We are** **Advertisers**	I know what makes a good television advert. I understand basic film terminology: long / wide shot, focus, close-up / zoom / panning / crane / tracking. I can plan a short advert for a target audience. I can further develop my skills relating to shooting and editing a video. I can consider key marketing messages, including identifying a unique selling point. I can capture video and sounds using appropriate hardware. I understand basic film editing terminology: trim / split / video & audio tracks / transitions/ title / credits, etc. I can use film-making software to appropriately sequence media I have collected. I can edit sound / video and add titles, credits and effects as appropriate.	**Creating a short television advert** Pupils practise presentation, communication, collaboration and film shooting and editing skills to create a short television advert. This advert can advertise themes/topics linked to Science, Topic and Literacy. Videos – Movie Maker/iMovie or others apps/software chosen by pupils.

Summer 2: **We are Publishers**	I can develop a printed yearbook or magazine incorporating text and images. I can use word processing or a publishing software to present my work. I can make choices about programs and features to use. I can justify my choices about design and choice of features to my peers.	**Creating a yearbook or magazine** The children's project is to create a collaborative digital end of year book for Year 6. **Software:** Magazine/yearbook – Microsoft Publisher

KS2 E-Safety (throughout the year)	I can use technology safely, respectfully and responsibly. I can keep personal information private. I can identify where to go for help and support when I have concerns about content or contact on the internet or other online technologies. I can recognise acceptable and unacceptable behaviour using technology. I know a range of ways to report concerns and unacceptable behaviour.	Visit the NSPCC for advice: https://www.nspcc.org.uk/keeping-children-safe/online-safety/ Ensure children understand that you cannot trust/believe all content on the internet. Search for Spoof or Fake websites e.g. https://zapatopi.net/treeoctopus/ Children to be introduced to the idea that people online can be whoever they wish to be because you cannot see them in the flesh. Even an image of someone does not necessarily link to the look of the real person. You could create a fake online profile to demonstrate this using: http://www.classtools.net/FB/home-page

	I can discuss the risks of online use of technology. I can identify how to minimise risks.	**Read online safety stories:** Chicken clicking, once upon a time online, Digidi ducks big decision, smartie the penguin (e-book) penguin pig, Monkeycow, Troll stinks, The Internet is like a Puddle, Webster's email, Webster's Bedtime, Webster's friend, Webster's manners, Little bird's internet security adventure. Activities for above stories can be found: https://kentesafety.wordpress.com/2015/06/05/online-safety-storybooks/