Goat Lees Primary School Computing and Online Safety Curriculum

	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
EYFS						
Online Safety	**Online Safety Updated PPT** Show slides to class and discuss – sign the Class AUP **Class laptops, desktops and tablets** Discuss how to use class laptops, desktops and tablets and what to do if we see something we don't like.	**Net Smart Kidz Cloud Chaos Game** Teachers and TAs discuss the words used within the game: bad content etc... https://www.netsmartzkids.org/games/	**Safer Internet Day** Theme dependent on the year's topic.	**What devices do we use at home?** https://www.youtube.com/watch?v=d5kW4pl_VQw Discuss what happened in the video... what could the child have done differently? Make a list with the class of all of the devices we use in in school and at home. How can we stay safe when we use these?	**Sharing information** Discuss with the class what their favourite games are. Do they ever have to give information about themselves into these games? Who should they ask first?	**Staying Safe Online at Home** https://www.youtube.com/watch?v=w7vZF-8bTFI Watch the Smartie Video with the class and pause to ask what Smartie should do. Children to join in with the online safety song.
Curriculum	**Systems and Networks** -Technology around us -Technology hunt -Begin logging in -navigating finding docs and websites	**Creating Digital Content** Digital Skills -Log on to computer - Microsoft word -typing and mouse practise. - ipad gestures (zoom etc) https://www.netsmartzkids.org/games/	**Systems and Networks** -What ways do children already use to communicate? Telephone, talk, letters -zoom	**Programming** -Bee Bots/ bluebots, using tactile reader. -Remote control cars/bluebot -camera/ipad	**Creating Digital Content** Purple Mash -Log on + explore -2 music -2 paint -2 animate -2write	**Consolidation of year** Revision questions and reminders to the class.
Computing Knowledge	I am beginning to know where to go for help when I have concerns about content Know the names of key Computing technologies	I know where to go for help if I have concerns about online content. I know what bad content means.	I understand how to communicate safely and respectfully using school computing technology and at home.	I am beginning to learn what an algorithm is.	I know that I should not share personal information online. I know that I should log out of Purple Mash when I am finished.	I know who I should speak to at school or at home, if I encounter content that upsets me online.
Computing Skills	Use technology safely and respectfully Start to recognise common uses of information technology	I am beginning to login to school computers I am beginning to use the school tablets.	I can communicate my ideas through Computing technology.	I can input a simple set of instructions into a computer device (BeeBot) to fulfill an objective.	I know how to play online games more safely. I can log in to Purple Mash and access specific games there.	I can use all of my skills to complete tasks on the school tablets, computers and various apps and websites.

Year 1						
Online Safety	**Online Safety Updated PPT** Show slides to class and discuss – sign the Class AUP	**Parent Zone** **Is that your internet?** PPT slides and activities. **Sharing information** https://www.youtube.com/watch?v=M-njh8mFvVk >Discussion about games and what information it asks us. Paying for add-ons etc...	**Purple Mash** **Unit 1.1** **Lesson 1** – safe logins, password, ownership **Safer Internet Day** Assembly and activities.	**Parent Zone** **Is that your search engine?** Safe use of search engines and how to avoid adverts / false information.	**Purple Mash** **Unit 1.1** **Lesson 4** – Exploring purple mash, importance of logging out.	**Parent Zone** *Digi-Dog intoduction* *Introduce Digi Dog. What three rules would you teach Digi Dog when using the internet? – what have we learnt during the year about Online Safety?*
Curriculum	**Systems and Networks** **Teach Computing Year 1: Unit 1 Technology around us** - Technology in our classroom - Using technology - Developing mouse skills - Using a computer keyboard - Developing keyboard skills - Using a computer responsibly **Typing Skills BBC Dance Mat Typing**	**Creating Digital Content** **Rising Stars - We are painters** - Illustrate an eBook using 2Paint	**Programming** **Rising Stars - We are treasure hunters** - Program BeeBots	**Creating digital Content** **Rising Stars - We are collectors** - Finding images using the web and save onto PowerPoint	**Data and information** **Teach Computing Year 1 – Unit 4 – Grouping Data** - Label & match - Group & count - Describe an object - Making different groups - Comparing groups - Answering questions	**Programming** **Purple Mash - Animation**
Computing Knowledge	I know the names of important information technologies at school and at home. I know who to speak to if I am upset or worried by online content.	I know what information I should keep private online. I know how computers can be used to create Art work.	I know that I must keep my passwords secure. I know who to speak to if I am upset or worried by online content. I know that BeeBots can be programmed to move.	I know that search engines help us to find information online.	I know that I must log out of websites and apps that I use in school and at home. I know that we can capture and compare data on a computer.	I know that algorithms can be used to create computer animations.

Computing Skills	I can use technology safely and respectfully I am finding the keyboard keys more quickly on a Desktop Computer and on a Tablet	I am beginning to use computer technology to create digital content.	I can input clear instructions into a computing device (BeeBot) to follow a simple route.	I can safely and effectively use search engines to find information and images. With support, I can add images and information to a PowerPoint.	I can use technology to organise, store and retrieve digital content.	I can use simple algorithms to create digital content.
Year 2						
Online Safety	**Online Safety Updated PPT** Show slides to class and discuss – sign the Class AUP	**Parent Zone** **Is that your Internet?** PPT slides and discussion with the class about their key rules to remain safe online.	**Parent Zone** **Is that your Password?** Work through with the children and discuss the importance of keeping passwords secret and complex. **Safer Internet Day** Assembly and activities.	**Parent Zone** **Digidog – Empathy** Read through the comments story and suggest how they could act differently: Children write a positive ending to the story, using their Online Safety knowledge.	**NetSmartKidz: Trusted Adult** https://www.youtube.com/watch?v=AmRln0Cq3rE Show the children the video and then discuss what webster should do…	**Purple Mash** **Sending emails** Unit 2.2 Lesson 3 Whole class responding to email together, what information do we share?
Curriculum	**Systems and Networks** **Teach computing Year 2 – Unit 1 – IT around us** - What is IT - IT in school - IT in the world - The benefits of IT - Using IT safely - Using IT in different ways **Typing Skills** **BBC Dancemat Typing**	**Programming** **Rising Stars - We are astronauts** - Programming on screen using Scratch - Programming physical devices (BeeBots) to explore an area.	**Creating Digital Content** **Rising Stars - We are photographers** - Taking, selecting and editing digital images.	**Creating Digital Content** **PowerPoint** -Creating and inserting sound -Creating and inserting images -Creating multimedia presentation -Inserting text boxes	**Programming** **Rising Stars - We are game testers** -Explore how computer games work -Edit a computer game, using Scratch to make it easier to play. -Fix a bug in the algorithm to ensure that the game works properly.	**Data and information** **Teach Computing Year 2 – Unit 4 – Pictograms** - Counting and comparing - Enter the data - Creating pictograms - What is an attribute - Comparing people - Presenting information

Computing Knowledge	I know who to speak to if I am upset or worried by online content. I know the names of important computer technology devices. I know some of the benefits of computer technology.	I know that an algorithm is a set of instructions for a computer device to follow. I know that these instructions must be clear to be followed accurately.	I know that I must include letters and numbers in my password to make it more difficult to copy. I know who to speak to if I am upset or worried by online content. I know what makes an effective photo.	I know that we must show empathy towards each other online. I can think of solutions to an online safety issue. I know that images, fonts and colours can enhance the effectiveness of my PowerPoint.	I know who my 'trusted adults' are that I can speak to about an online safety issue. I know that Computer games are made, using programmed instructions.	I know that emails must be sensible and polite. I know that Computers can make charts and tables to show our data.
Computing Skills	I am becoming more familiar with the keys on a keyboard and I can type more quickly. I can login to computers and tablets more quickly in school.	I can input a more complex set of instructions with a BeeBot device to allow it to explore in different directions.	I can take a photo using a tablet device or a digital camera. I can edit a photo using the photo device itself. I can edit a photo using tools on a desktop computer.	I can make an effective PowerPoint about our History learning. I am editing fonts, backgrounds and animations using PowerPoint.	I can edit the algorithm on a game, to make it easier to play. I can edit a 'bug' in a game so that it works properly.	I can send an email to my class teacher and classmates. I can create a pictogram to present data. I can create, interpret and compare data in different pictograms.

Year 3

Online Safety	**Online Safety Updated PPT** Show slides to class and discuss – sign the Class AUP	**Google, Internet Legends** *Think before you share* Activity 1 Play Interland: Mindful Mountain	**Google, Internet Legends** *Check It's for real* Activity 3 Play Interland: Reality River **Safer Internet Day** Assembly and activities.	**Google, Internet Legends** *Protect your stuff* Activity 1 Play Interland: Tower of Treasure	**Google, Internet Legends** *Respect each other* Activity 1 Play Interland: Kind Kingdom	**Google, Internet Legends** *Respect each other* Activity 3 Play Interland: Kind Kingdom
Curriculum	**Programming** **Rising Stars – We are game Designers** **Typing Skills** BBC Dance Mat Typing Skills	**Creating Digital Content** **Rising Stars – We are presenters** - Videoing performance using iMovie	**Systems and Networks** **Teach Computing Year 3 – Unit 1 – Connecting computers** - How does a digital device work? - What parts make up a digital device? - How do digital devices help us?	**Programming** **Rising Stars – We are programmers** - Programming an animation in Scratch	**Data and Information** **Teach Computing Year 3 - Unit 4 – Branching Databases** - Yes or no questions - Making groups - Creating a branching database - Structuring a branching database - Using a branching database	**Creating Digital Content** **Teach Computing Year 3 - Unit 5 – Desktop publishing** - Words & pictures - Can you edit it? - Great template! - Can you add content? - Lay it out

			- How am I connected? - How are computers connected? - What does our school network look like?		- Two ways of presenting information	- Why desktop publishing?
Computing Knowledge	I know who I should speak to if I am scared, worried or upset by online content. I understand how simple algorithms work.	I am starting to understand respectful and responsible behaviour online. I am starting to learn what information I should and should not share online.	I am beginning to know that some information on the internet may be false or biased. I am beginning to understand computer networks, including the internet.	I understand why I must keep my passwords private. I know which information I should and should not include on my online accounts. I know that computer programs, such as Scratch, can be used to program an animation.	I know that I must be respectful. I can recognise acceptable and unacceptable content and I know how to report concerns about content. I know that computers can be used to create databases and present data.	I know that I must be respectful. I can recognise acceptable and unacceptable content and I know how to report concerns about content. I know which programs are best for creating a published document. I understand why a desktop computer is best for creating and editing this content.
Computing Skills	I am starting to design and write programs to design an exciting game. I am typing more quickly, using computers and tablets.	I can record video footage to create new content. I can use programs to edit the content of my video.	I can label parts of a network within school and a larger network across a country or even the world. I am beginning to understand the opportunities offered by connectivity through networks.	I can use sequence, selection and repetition in my coding for an animation. I can use logical reasoning to explain the algorithms in my code and look for, and fix bugs in my coding.	I can create a systematic database to present data. I can appreciate how results are selected and ranked.	I can create, edit and publish digital content.
Year 4						
Online Safety	**Online Safety Updated PPT** Show slides to class and discuss – sign the Class AUP	**Google, Internet Legends** *Think before you share* Activity 4 Play Interland: Mindful Mountain	**Google, Internet Legends** *Check It's for real* Activity 1 Play Interland: Reality River **Safer Internet Day** Assembly and activities.	**Google, Internet Legends** *Protect your stuff* Activity 2 Play Interland: Tower of Treasure	**Google, Internet Legends** *Respect each other* Activity 4 Play Interland: Kind Kingdom	**Google, Internet Legends** *Respect each other* Activity 5 Play Interland: Kind Kingdom

Curriculum	Creating Digital Content	Programming	Programming	Data & Information	Creating Digital Content	Systems and Networks
	Teach Computing Year 4 - Unit 2 - Audio production OR Unit 4 – Photo Editing - Digital recording - Recording sounds - Creating a podcast - Editing digital recordings - Combining audio - Evaluating podcasts - Changing digital images - Changing the composition of images - Changing images for different uses - Retouching images - Fake images - Making & evaluating a publication **Typing Skills** BBC Dance Mat Typing Practice. Typing speed competition in class.	Teach computing Year 4 – Unit 3 – Repetition in shapes - Programming a screen turtle - Programming letters - Patterns and repeats - Using loops to create shapes - Breaking things down - Creating a program	Micro:bits http: //microbit.org/ teach/lessons/first-lessons-with-makecode-and-the-microbit/ 6 lessons discovering the Mico:bit	Teach Computing Year 4 - Unit 4- Data logging Use data loggers OR Micro:bits - Answering questions - Data collection - Logging - Analysing data - Data for answers - Answering my question	Rising Stars – We are web page designers Creating a web page about cyber safety	Teach computing Year 4 – Unit 1- The Internet - Connecting networks - What is the Internet made of? - Sharing information - What is a website? - Who owns the web? - Can I believe what I read?
Computing Knowledge	I know that I must be respectful. I can recognise acceptable and unacceptable content and I know how to report concerns about content. I know that some images, videos and audio that I encounter online may be fake.	I can explain what information I should and should not share online. I know that algorithms can be created to make art on a computer.	I can explain that some information on the internet may be false or biased. I know that programming also allows us to control physical systems, not just programs on a computer.	I understand why I must keep my passwords private. I understand that I must keep personal information private. I know that computers can be used to program a data logger. I know that I can record data directly to a computer for analysis.	I know that I must be respectful. I can explain acceptable and unacceptable content and I know how to report concerns about content. I know that websites are 'written' and edited by web designers.	I know that some information on the internet may be false or biased. I understand how computer networks, including the internet, allow us to connect together. I know that content on websites, including what I publish on there is owned by the website owners.

Computing Skills	I can create, edit, publish and evaluate digital audio / photo content.	I can create an algorithm to program a drawing app to create patterns and pictures.	I am beginning to use coding skills to program and control a physical system.	I can use coding skills to program and control a physical system and to record data.	I can use a program to make content for a webpage about online safety.	I can explain how a network is connected together.
Year 5						
Online Safety	**Online Safety Updated PPT** Show slides to class and discuss – sign the Class AUP	**Google, Internet Legends** *Think before you share* Activity 2 Play Interland: Mindful Mountain	**Google, Internet Legends** *Check It's for real* Activity 2 Play Interland: Reality River **Safer Internet Day** Assembly and activities.	**Google, Internet Legends** *Protect your stuff* Activity 3 Play Interland: Tower of Treasure	**Google, Internet Legends** *Respect each other* Activities: 3 Play Interland: Kind Kingdom	**Purple Mash** Unit 5.2 – Lesson 1 comic strip of online safety
Curriculum	<u>Systems and Networks</u> **Purple Mash - Emails**	<u>Data and Information</u> **Teach Computing Year 5 - Unit 4 – Flat-file databases** - Creating a paper-based database - Computer databases - Using a database - Using search tools - Comparing data visually - Databases in real life	<u>Programming</u> **Coding**	<u>Systems and Networks</u> **Teach Computing Year 5 - Unit 1 – Systems and searching** - Systems - Computer systems and us - Searching the web - Selecting search results - How search results are ranked - How are searches influenced	<u>Creating digital content</u> **PowerPoint** -Present my ideas using multimedia – including animation. -Video edit and drop in -Create and insert hyperlinks -Jump to slide (book marking, chapters)	<u>Creating digital content</u> **Teach computing Year 6 - Unit 5 - 3D/2D Modelling** - Introduction to 3D modelling - Modifying 3D objects - Make your own name badge - Making a desk tidy - Planning a 3D model - Make your own 3D model
Computing Knowledge	I know that I must be respectful. I can recognise acceptable and unacceptable content and I know how to report concerns about content. I know that emails must be professional and polite.	I can explain what information I should and should not share online. I know that I can compare data and search for data, using a database program.	I can explain to different people that some information on the internet may be false or biased. I know different methods to test whether online information is true or false.	I can explain why I must keep my passwords private. I can explain which information I and other people should and should not include on our online accounts. I understand how the world wide web provides opportunities for communication,	I know that I must be respectful. I can recognise acceptable and unacceptable content and I know how to report concerns about content. I understand the key functions of the 'ribbon tabs' in PowerPoint.	I can explain all of my key online safety learning from this year. I can recognise acceptable and unacceptable content and I know how to report concerns about content. I know that computers can be programmed to

				collaboration and searching.		control a physical system.
Computing Skills	I can send an email to my class teacher and classmates.	I can create a systematic database to present data. I can search for information in my own databases and other people's databases. I can evaluate databases created by others.	I can independently design, write and debug a program that accomplish specific goals	I can use search technologies effectively, appreciate how results are selected and ranked, and evaluate the results.	I can use my knowledge of the buttons and functions of PowerPoint to perform tasks quickly and effectively. I can create a PowerPoint to present my ideas, including inserted audio/video, hyperlinks and personalised designs.	I can design, write and debug a program to design content and then control a physical system to create my own badge.
Year 6						
Online Safety	**Online Safety Updated PPT** Show slides to class and discuss – sign the Class AUP	**Google, Internet Legends** *Think before you share* Activity 3 Play Interland: Mindful Mountain	**Google, Internet Legends** *Check It's for real* Activity 2 Play Interland: Reality River **Safer Internet Day** Assembly and activities.	**Google, Internet Legends** *Protect your stuff* Activity 4 Play Interland: Tower of Treasure	**Google, Internet Legends** *Respect each other* Activity 5 Play Interland: Kind Kingdom	**Google, Internet Legends** When in doubt, discuss – Activity 4 Play Interland: All levels – record scores amongst the Year 6s
Curriculum	**Creating Digital Content** **Green Screen** - DoInk	**Systems and networks** **Teach Computing Year 6 – Unit 1 - Communication and collaboration** - Internet addresses - Data packets - Working together - Shared working - How we communicate - Communicating responsibly	**Data and information** **Teach Computing Year 6 – Unit 4 - Spreadsheets** - Collecting data - Formatting a spreadsheet - What's the formula? - Calculate and duplicate - Event planning - Presenting data	**Programming** **Teach computing Year 6 - Unit 3 - Variables in games** - Introducing variables - Variables in programming - Improving a game - Designing a game - Design to code - Improving and sharing	**Programming** **Teach computing Year 6 - Unit 6 – Sensing movement** - The micro:bit - Go with the flow - Sensing inputs - Finding your way - Designing a step counter - Making a step counter	**Creating Digital Content** **Teach computing Year 6 – Unit 2 – Web page creation** - What makes a good website - How would you lay out your webpage? - Copyright or copyWRONG? - How does it look? - Follow the breadcrumbs - Think before you link!

Computing Knowledge	I can recognise acceptable and unacceptable content and I know how to report concerns about content. I know that computer programs can allow us to record, edit and publish video content.	I can explain what information I should and should not share online and use my knowledge to educate younger children in the school.	I can explain to younger children that some information on the internet may be false or biased. I know different methods to test whether online information is true or false. I know that I can input data into a spreadsheet before converting it into other types of chart/table that make analysis easier.	I can explain why I must keep my passwords private. I can explain whether a password would be effective or not. I can explain why some information must be kept offline. I know that programming can be used to create and debug a computer game.	I know that we all must be respectful online. I know that programming also allows us to control physical system	I know who I can speak to if I have concerns about content online. I know that I must advocate respectful behaviour online. I know what makes a website effective. I know that we must be cautious when clicking hyperlinks in webpages.
Computing Skills	I can use software to create, edit and publish video content I can analyse and evaluate my video and my classmates' videos with positive feedback and ideas for improvement.	I can explain how the world wide web provides opportunities for communication, collaboration and searching. I can explain how information is transferred across the internet. I can communicate my knowledge and ideas effectively and safely online.	I can collect, edit and analyse data using a spreadsheet in order to support event planning. I can input simple formulae into a spreadsheet to make calculations more streamlined.	I can independently design, write and debug a computer game using algorithms. I can use variables in my game to make it more exciting.	I can use coding skills to program and control a physical system to achieve a specific goal.	I can deploy my knowledge and skills to use a program to make content for an effective webpage, including hyperlinks.