Coatham CE Primary School
Computing Skills

Ability Group: _____

Names: _____

Skills	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Computer Science – Coding	Understand that an algorithm is a series of instructions to achieve an outcome. Create a 'written algorithm story' to direct someone to achieve a task. Give instructions to the Bee Bots, building up to a simple sequence of instructions. Use, then analyse, in simple terms, an existing program. Start to use the term 'debug'.	Use the term 'algorithm' when programming. Use the term 'debug' when editing. Write a clear and precise 'algorithm story' to direct someone to achieve a task. Explore and evaluate 'Scratch' games. Plan a very simple sequence of instructions for a 'sprite'. Predict using logical reasoning what will happen, then edit and refine (debug).	Design a simple series of instructions (algorithm). Test a simple series of instructions (algorithm). Debug a simple series of instructions (algorithm). Start to use 'repeat' commands when writing instructions. Talk about the similarities and differences between different coding applications (Bee Bots, Scratch etc). Use logical reasoning to explain how a simple algorithm works.	Design algorithms to achieve a specific goal. Test algorithms. Debug algorithms. Use the 'if…then' command. Explore inputs and sensors. Use logical reasoning to explain how algorithms work.	Use a variety of variables when using Scratch (eg sounds, looks, sensors) Confidently design, test and debug own algorithms. Use logical reasoning to explain how own algorithms work.	Design own game which includes sprites, backgrounds, variables, sensors, scoring and/or timers. Evaluate the effectiveness of own game and debug if required.

Coatham CE Primary School
Computing Skills

Skills	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Digital Literacy - Data	Know that images give information. Say what a pictogram is showing them. Put data into a program (eg 2count) Create a physical photo database. Sort objects and pictures in lists or simple tables	Pose questions, collect data, generate charts and graphs. Retrieve and edit data from a prepared database. Start to explore, branching databases, carroll diagrams, 2graph, 2calculate, simple spreadsheets.	Select a question to answer. Recognise which information is suitable for their topic. Design a questionnaire to collect information. Collect data to answer a question. Sort and organize information in different ways. Construct a branching database. (2question) Select an appropriate graph type to represent data.	Recognise tools for collecting data. Search a database. Collect data, create a database, present findings and analyse. Analyse data logging results. Discuss and look at QR codes. Explore spreadsheets.	Use spreadsheets and databases to record and interpret information. Search using and, or, ‹ ›. Know how to check for and spot inaccurate data. Sort and interpret data. Research online databases.	Use spreadsheets for a purpose. Make graphs from own spreadsheets. Sort and filter information. Understand that changing the numerical data effects a calculation. Use formulas in spreadsheets to present and analyse information. Research and evaluate online databases.

Coatham CE Primary School
Computing Skills

Skills	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Digital Literacy	Use various tools: Brushes Pens Lines Fill Spray Stamps Save work. Retrieve work. Amend work. Print work. Use the following: Spacebar Backspace Enter Shift Arrow keys Start to type using 2 hands. Word process short texts rather than copying up written work. Start to make own selections as to which software would be appropriate for the task.	Take photographs using: Digital camera iPad Access, review and delete photographs. Apply different effects to digital photographs: Resize Rotate Enhance Colour adjust Know how to crop photographs. Getting quicker at typing with 2 hands. Use different font sizes, colours and effects to communicate meaning. Align text: Left Right Centre Explain why it is important to type an email address correctly.	Record usable footage using a camera and iPad. Import and edit video footage. Record an audio commentary. Use the print screen function to capture an image. Take photographs of a class activity eg Science experiment, drama. Select text and make simple changes: Bold Italic Underlined Type with 2 hands.	(IPad maintenance) Know how to change the home screen, save battery life, copy, paste, open and edit previously saved work. Create a simple composition using sequencing software. Export a composition in a standard compressed format. Edit a musical composition. Use a variety of presentation methods eg photographs, videos, word processing, powerpoint, publisher documents. Start to use a class blog. Collect data using a data logger with support.	(IPad maintenance) Know how to change the home screen, save battery life, copy, paste, open and edit previously saved work. Use a class blog. Create a Wordle for display. Collect and use photographs, sounds, videos and images linked to topics. Use a variety of presentation methods eg photographs, videos, word processing, powerpoint, publisher documents, Keynotes, Piccollage. Collect and use data using a data logger. Confidently type with 2 hands.	(IPad maintenance) Know how to change the home screen, save battery life, copy, paste, open and edit previously saved work. Use a class blog effectively. Create a short video story using iPads linked to a topic eg history, geography, science. Add titles and credits, transitions and special effects.

Coatham CE Primary School
Computing Skills

Skills	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Information Technology	Talk about how technology is used in the world about them. Talk about the websites they have been on. Explore websites by clicking on buttons, arrows, menus and hyperlinks (modelled by an adult). Navigate 'back' by clicking on the 'back' button. Complete a search under the supervision of an adult. Explore the use of email using an adult's email account (whole class).	Talk about the uses of technology linked to a variety of topics (weather, history, television etc). Recognise an email address. Find @ on a keyboard. Contribute to a class email. Open and select to reply to an email as a class. Talk about and identify a purpose for a class blog. Start to contribute to one. Complete safe searches http://infant.parkfieldprimary.com Discuss what is true: http://webfronter.com/rbkc/tomatospider/	EMAIL?? Know what a blog is and what it is used for. Comment on and contribute to a class blog in a school classrom situation. Use a search engine http://www.swiggle.org.uk Talk about the reliability of information found on the internet. Discuss what is true. http://zapatopi.net/treeoctopus/	EMAIL?? Comment on and contribute to a class blog independently at school. Understand keywords are needed to complete an online search. Understands copyright and use copyright-free websites for resources. Understand that websites such as Wikipedia are made by users (link to E-Safety) Know and use some simple HTML tags. Discuss advertising and pop-ups http://pbskids.org/dontbuyit/advertisingtricks/index.html How reliable is online information? http://www.thedogisland.com Start to explore facetime.	EMAIL?? Comment on and contribute to a class blog independently at school and at home. Use advanced search functions in Google eg quotations. Examine a range of websites and web tools and how they work in different ways. Use strategies to check reliability of information eg cross checking with books. Use their knowledge of domain names to judge the validity of websites.	EMAIL?? Comment on and contribute to a class blog independently at school and at home. Compare searches and understand how key words work. Know how 'hits' work on a website and the reliability of the information. Use Google in a safe way. Know the difference between the internet and www. (Internet is the container, the www is a part within the container. OR the internet is the restaurant and the www is the most popular dish on the menu!)

Coatham CE Primary School
Computing Skills

Skills	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
E-Safety	Know and follow our 'Staying Safe on the Internet' rules. Make a decision as to whether or not statements or images found on the internet are likely to be true. Identify different devices that go on the internet and those that do not. Say what counts as personal information. ThinkUKnow (5-7) lessons, Hector's World, Lee and Kim.	Know and follow our 'Staying Safe on the Internet' rules. Tell someone if they find images they are concerned about. Explain why they should not post some photographs publicly. Identify obviously false information in a variety of contexts. Recognise that a variety of devices (eg XBox, PSP, tablets, phones and computers) connect users with other people. Identify personal information that should be kept private. Consider other people's feelings on the internet. Resources: Penguinpig story ThinkUKnow 5-7 Hector's World, Lee and Kim. Sids Top Tips video You Tube	Know and follow our 'Staying Safe on the Internet' rules. Question the 'validity' of what they see on the internet. Use a browser address bar not just search box and shortcuts. Think before sending and suggest consequences of sending/posting. Recognise online behaviours that would be unfair. Keep information safe and private. Begin to understand how to keep safe when sharing information online. Know how to report online problems/cyber bullying. Recognise the need to choose afe appropriate online sites. Know what a virus is. Resources: ThinkUKnow 5-7 /8-10 Digiduck's Big Decision Book, Sids Top Tips	Know and follow our 'Staying Safe on the Internet' rules. Recognise that social networking sites and features are built into other things eg online games, searches, hand held consoles. Keep personal information safe by hiding identity, share safety rules with others. Make judgments in order to stay safe whilst communicating with others online. Identify dangers when presented with scenarios, social networking profiles etc. Develop a secure password. Understand how to protect against viruses. Resources: ThinkUKnow 8-10 – Digizen, Cybercafe, Sids Top Tips.	Know and follow our 'Staying Safe on the Internet' rules. Create own class rules for using online sites and activities. Judge what sort of privacy settings might be relevant to reducing different risks. Know when and how to change a password to ensure safety. Judge when to answer a question online and when not to. Be a good online citizen and friend, not a 'digital bystander'. Use different sources to double check information found. Find and cite the web addresses for any information or resources found online. Resources: ThinkUKnow 8-10 Jigsaw, Cyber Café, Sids Top Tips.	Know and follow our 'Staying Safe on the Internet' rules. Create own class rules for using online sites and activities. Know how to use find report and flag buttons in commonly used sites. Name sources of help eg Childline, Cybermentors etc. Use CEOP website (ThinkUKnow) and explain to parents what it is for. Discuss scenarios involving online risks. State the source of information found on the internet. Act as a role model for younger pupils, including promoting Sid's Top Tips.