White Laith Primary School Computing Achievement statements – (What we intend to teach.)

	POS	**Data Handling (Skills)**
Key stage 1	IT1	I have classification skills by carrying out sorting activities using of onscreen Carroll or Venn diagrams
	IT1	I can use simple graphing software to produce pictograms to show the results of a survey.
	IT1	I can enter data I have collected in to a simple graphing program to create a bar graphs to show results.
	IT1	I can use a branching database, where appropriate, to sort and identify items.
	IT1	I can use basic search tools in a prepared onscreen database to answer simple questions, e.g., how many children have brown hair?
Lower Key Stage 2	IT3	I can create frequency diagrams and graphs to answer questions.
	IT3	I can create an efficient onscreen branching database to sort and identify items that uses effective yes/no questions.
	IT3	I can use an digital onscreen database to answer straightforward questions by searching, matching and ordering the contents of a single field.
	IT2	I can use 'AND' build search criteria to find answers.
Upper Key Stage 2	IT3	I can construct and refine, scatter graphs, line graphs and pie charts to present data to a specific audience to display findings.
	IT2	I can design questions and perform complex searches using more than one criterion to search large pre-prepared database looking for relationships/patterns.
	IT3	I can design a data capture form, e.g. a questionnaire or table to collect information to answer a specific question.

		Data Handling (Knowledge and Understanding)
Key stage 1	IT1	I understand that ICT can be used to accurately sort and identify items.
	IT1	I understand ICT can be used to create, display, add to, change graphs easily.
	IT1	I understand that unless data has been entered accurately it cannot be used to provide correct answers to questions.
Lower Key Stage 2	IT3	I understand and use correctly the vocabulary: file, record, field, sort and search.
	IT3	I understand that there are different types of data, e.g., numeric, alphabetic, date, alphanumeric, currency, image.
Upper Key Stage 2	DL1	I recognise the consequences of using inaccurate data and relate to the outside world, e.g., police, doctors, banks, school databases.
	IT3	I can explain how IT enables you to search/sift through large amounts of different types of information and I can describe the advantages of using IT to do this.
	DL2	I understand the need for data protection and how it affects use and storage of data in the real world.

	POS	**Datalogging (Skills)**
Key stage 1	IT1	I can use a Vu datalogger to measure the temperature of external conditions.
	IT1	I can use a Vu datalogger to measure the sound level of external conditions.
	IT1	I participated in a whole class demonstration on IWB using the data logger monitoring live data e.g. changing sound levels over time.
Lower Key Stage 2	IT3	I can use a Vu datalogger to measure the sound level of external conditions, adjusting the measuring range as required.
	IT3	I can use a Vu datalogger to measure the light level of external conditions, adjust the measuring range as required.
	IT3	I can use a Vu datalogger to 'snap shot' a series of related but separate readings in the course of an appropriate investigation.
	IT3	I can use a datalogger to record data continuously over time (chosen time span e.g. overnight) as part of an investigation.

	IT3	I can download recorded data into a PC and use datalogging software to display the data in an appropriate graph as part of an investigation.
Upper Key Stage 2	IT3	I can use a Vu datalogger external sensor to measure the temperature of external conditions.
	IT3	I can use a Vu dataloggers connected to the computer to displaying live data as part of an appropriate investigation.
	IT3	I can use a heart rate monitor in the course of a scientific investigation.
	IT3	I can use a Vu datalogger to make and record accurate measurements and produce graphical information to answer and solve simple problems.

Datalogging (Knowledge and Understanding)

Key stage 1	IT1	I understand that a Vu dataloggers is a electronic device the can measure the level of external condition temperature, light and sound.
	IT1	I can participate in a demonstration of the datalogger monitoring live data and displaying readings on PC. I understand that the datalogger can show real time changes in external conditions.
Lower Key Stage 2	IT3	I understand that dataloggers can collect data more efficiently compared with manual methods.
	IT3	I know that dataloggers can collect data for a given time. E.g. Over a weekend.
Upper Key Stage 2	IT3	I know that the measuring range can be set to enable a datalogger to record the lowest and highest values which may occur.
	IT3	I know when to choose dataloggers as the most appropriate tool for capturing data for a particular purpose.

	POS	**Digital Art (Skills)**
Key stage 1	IT1	I can create a picture using the pen, brush, and flood fill tools and selected colours and line thickness to achieve a desire effect.
	IT1	I can create pictures using the shape, spray and stamps tool to communicate a specific idea.
	IT1	I can use a range features in paint software (such as, repeat and reflect) to create artwork to achieve a desired effect or artistic style.
Lower Key Stage 2	IT1	I can independently use a digital camera and tablet (e.g. iPad) to acquire, store and retrieve still images.
	IT1	I can select specific areas of an image, copy, resize, and paste, to use for a purpose e.g. to make repeating patterns, to create a cubism style art.
	IT3	I can talk about and evaluate the quality of my own and others' captured images and make decisions whether to keep, delete or change them.
Upper Key Stage 2	IT3	I can use various tools in paint packages or photo manipulation software to edit/change an image e.g. applying different special effects, to visualise an idea, feeling or emotion
	IT3	I can use a range of paint package tools in a more detailed and precise manner emulating techniques and styles of popular artists.

Digital Art (Knowledge and Understanding)

Key stage 1	IT1	I understand the need to frame an image or scene and keep the camera still.
	IT1	I understand there are a variety of tools in a paint/graphics package, each fulfilling a different purpose.
Lower Key Stage 2	IT3	Understand that a digital image can be captured from different devices and it can be stored, developed and enhanced.
	IT3	Understand that evaluation and improvement are vital parts of the design process and ICT allows changes to be made quickly and efficiently.

White Laith Primary School Computing Achievement statements – (What we intend to teach.)

Upper Key Stage 2	IT3	Understand that computers can save digital images in many different file formats and that some are better suited to certain purposes than others.

	POS	**Digital Research (Skills)**
Key stage 1	IT1	I can use buttons, arrows, menus and hyperlinks to navigate and explore appropriately teacher selected websites.
	IT1	I can find information using the search within a website.
Lower Key Stage 2	IT2	I can find appropriate websites for information using keyword searches in a child friendly search engine.
	IT2	I can use a child friendly search engine to locate different media including images, and videos.
	IT2	I use the summaries (website description) displayed within search results, to choose which sites are appropriate to explore further, to find what I'm searching for.
	IT2	I search for a phrase using quotation marks to locate for precise information.
Upper Key Stage 2	IT3	I choose to use the internet when appropriate as a tool for independent research.
	DL4	I use cross checking with different websites to verify the accuracy and reliability of information.
	DL4	I question where website content might originate from by looking at the web address, author, contact us sections, linked pages, to give me clues to a website's authenticity and reliability.
		Digital Research (Knowledge and Understanding)
Key stage 1	IT1	I understand that computers, tablets and smart phones can give rapid access to a wide variety of information stored on the internet.
	IT1	I understand that they are different forms for information e.g., text, images, sounds, multimedia.
Lower Key Stage 2	IT1	I understand that a website has a unique address.
	CS7	I understand the difference between the Internet and the World Wide Web.
	DL4	I understand adverts and popups if clicked on can divert me away from the website I am using.
	IT2	I understand what a search engine does.
	DL4	I understand that anyone can author a website and this means the content could be inaccurate or even offensive.
	DL5	I understand that I must not copy information directly from websites but put it in my own words.
Upper Key Stage 2	DL5	I understand the concept of copyright and I know I can only use text, pictures, sounds and videos in my own work that are in the "public domain" and copyright free.
	CS7	I understand how computer networks can provide multiple service, such as the World Wide Web.
	DL5	I understand that good online research involves processing information and interpreting it for others rather than direct copying.

	POS	**Electronic Communication and Online Publishing (Skills)**
KS 1	IT3	I can post a copy of my completed work to a online display board on the school VLE.
Lower Key Stage2	IT3	I can create a post on a personal blog and write a reply/comment on other class blogs within my school's VLE.
	IT3	I can independently contribute to chats and/or discussion forums in school's VLE making purposeful contributions to respond to another pupil's question or comment.
	IT3	I can log on to my school email account and open emails and create and send appropriate replies.

White Laith Primary School Computing Achievement statements – (What we intend to teach.)

UKS2	IT3	I can compose and email, use the subject heading and use the contacts or enter the email address of the intended recipients.
	IT3	I can save an email in draft format and then return and edit prior to sending.
	IT3	I can publish my work to a more global audience, using appropriate online services, e.g. creating webpages, blogs and podcasting.

Electronic Communication and Online Publishing (Knowledge and Understanding)

KS 1	DL1	I understand the different ways that message can be sent e.g. email, text message, letter, phone and the advantages of each one.
	DL3	I understand work published to a VLE can be seen by people inside the school community.
Lower Key Stage 2	IT1	I understand that an email has to be sent to a unique email address.
	DL3	I understand work published on the school website can be seen by people inside and outside the school community (anybody.)
	DL5	I understand that the text size and font, and appropriate language to be used in an email, blog post, and discussion forums
	DL5	I understand that the content of my communications must always be respectful and responsible.
Upper Key Stage 2	CS7	I know that computer networks (including the internet) are made up of computers connected together using radio or satellite signals, copper wire or fibre-optic cables, and include machines such as 'routers', 'switches' and 'servers.
	CS7	I understand that computer networks send and receive digitised data using the same method of braking it up into small 'packets', and including the IP (internet protocol) address of the sender and recipient.
	CS7	I know the internet has created many opportunities for communication, collaboration, real-time collaboration.

	POS	**E-safety (Skills)**
KS 1	DL2	I can minimise the browsers window or use the back button or click the 'Red Hand' if I see something inappropriate online or makes me feel uncomfortable, and tell a trusted adult.
LKS2	DL5	I can identify and avoid popups, advertisements and links to adult social media on website
UKS2	DL5	I can identify and resist pressurising and manipulative behaviour online.

E-safety (Knowledge and Understanding)

Key stage 1	DL2	I know to stop and ask an adult for help if something happens that I don't understand when using the internet.
	DL2	I understand that personal information including passwords, should not be shared, either online or offline, without permission of a trusted adult.
	DL2	I know to ask a trusted adult for help if something online or offline I see or hear makes me feel uncomfortable or unsafe.
	DL2	I understand the benefits and use a 'nickname' for online use where appropriate.
	DL2	I know to tell a trusted adult immediately if someone in the online world asks to meet me in the offline world.
Lower Key Stage 2	DL5	I understand the need to keep personal information including mobile phone number and email address private when communicating online.
	DL5	I know, if asked for personal details in communications, to save the message and show it to a trusted adult.
	DL5	I understand the cyber bullying is unacceptable and I know I can report an incident of cyber bullying to a trusted adult, if and when it occurs.
	DL5	I know to save an unpleasant message which can be use for evidence purposes.
	DL5	I understand the dangers of using an adult search engine.

	DL5	I understand permission must be obtained before uploading images of others.
	DL5	I know what images are suitable to include in an online profile.
Upper Key Stage 2	DL5	I understand the risks of sharing photos, videos and comments publicly.
	DL5	I understand that online environments have security settings, which can be altered, to protect me.
	DL5	I understand the need to respect privacy of others, by not uploading/using images or personal information without permission.
	DL5	I understand some malicious adults may use various techniques on the internet to make contact, elicit personal information and groom young children e.g. fake profiles.
	DL5	I know I can report anything suspicions using the CEOP 'report abuse' button on websites and online gaming sites I use.
	DL5	I know that content e.g. photographs and videos, put online may be very difficult to remove.

	POS	**Programming (Skills)**
Key stage 1	CS1	I can create and follow a sequence of instructions (algorithm) to complete a given actual task e.g. Clean teeth.
	CS1	I can generate and follow a squence of commands to navigate a Beebot around a course which includes forwards, backwards, and quarter turn clockwise and anticlockwise instructions.
	CS1	I can give commands one at a time using an onscreen keypad which includes forwards, backwards and quarter turn clockwise and anticlockwise instructions to navigate an onscreen character.
	CS2	I can create and follow a simple sequence of commands (program) to complete a range of onscreen tasks, e.g. to draw simple geometric shapes or patterns, to move a character to a desired location.
	CS2	I can make changes to a sequence of commands to make a program work or improve its effectiveness.
	CS2	I can build a program using 'Blockly' to accomplish an onscreen goal.
	CS3	I can make a prediction about what a simple program will do before I run it and explain my prediction logically.
	CS5	I can create programs that use loops to accomplish given goals.
Lower Key Stage 2	CS4	I can plan, create, test and modify a program using 'Blockly' programming language, to accomplish a goal.
	CS4	I can solve a problem by decomposing it into smaller parts.
	CS5	I can create programs that use conditionals to accomplish given goals.
	CS5	I can create programs that use nested loops to accomplish given goals.
	CS5	I can create programs that use events handlers to accomplish given goals
Upper Key Stage 2	CS4	I can plan, create, test, modify and refine programs controlling physical systems which use input and output devices such as sensors and motors to accomplish specific goals.
	CS5	I can create functions and use them in my programs to accomplish given goals.
	CS5	I can create programs that use variables to accomplish given goals.
	CS6	I can identify similarities and differences in situations and can use these to solve problems (Pattern Matching).
	CS6	I can pulling out specific differences to make one solution work for multiple problems (Abstraction)
	CS6	I can explain clearly the thinking behind my algorithms and programs, describing step by step why I have solved a problem the way I have, and how I detected and corrected errors.
		Programming (Knowledge and Understanding)

White Laith Primary School Computing Achievement statements – (What we intend to teach.)

KS1	CS1	I understand that devices respond to commands.
	CS1	I can identify a variety of controllable devices in the home and community.
	CS1	I understand that an algorithm is a sequence of instructions for performing a specific task.
	CS1	I understand that a program is a sequence of instructions written in a language a programmable toy or a computer can understand.
	CS1	I know that "Blockly" is a computer programming language.
	CS1	I know that mistakes in programs are called 'bugs'
	CS2	I understand 'debugging' is finding errors and fixing them to make a program work.
Lower Key Stage 2	CS4	I know that splitting a problem in to smaller parts is called 'decomposition', and this is part of 'computational thinking'.
	CS4	I understand 'debugging' is finding ways of modifing programs to make them work more efficiently.
	CS5	I understand the difference between inputs and outputs.
	CS6	I understand that I can show logical thinking by explaining 'step by step' how I solved a problem.
Upper Key Stage 2	CS4	I understand a computer can be programmed to use sensors to monitor external conditions and control the action of output devices depending on these conditions.
	CS6	I know how to use the tools of Computational Thinking (decomposition, pattern matching, abstraction, and algorithms) to figure out how to solve problems for myself.
	CS6	I understand the need for precision when creating programs to ensure reliablility.
	CS6	I understand that computer science involves finding better algorithms that are more efficient and save time and cost in the real world.

	POS	**Sound (Skills)**
Key stage 1	IT1	I can use a microphone to record my voice and add it to my work.
	IT1	I can locate, listen to and select suitable sounds to add to my own work from a sound bank with in a program such as '2create a story'.
	IT1	I can use software to explore and create sound and musical phrases for a purpose.
Lower Key Stage 2	IT1	I can locate and import sound files from sound bank on the school network into my own work.
	IT1	I can import music, sound effects, and recordings in to animation software for a specific project.
	IT1	I can use music composing software to experiment with repeating and sequencing sound patterns.
	IT1	I can use IT to create and perform a multi-part piece (sounds or music) that would otherwise not be possible in a live situation.
Upper Key Stage 2	IT3	I can independently select, edit, manipulate and combine sound files from a range of sources to create a composition for a specific purpose and audience. E.g. Animated film.
	IT3	I can use IT to produce music or sound effects for a specific purpose, considering the impact on the audience, e.g. length, style and genre.
		Sound (Knowledge and Understanding)
Key stage 1	IT1	I understand that recording devices have stop, record and playback functions.
	IT1	I understand that adding a background sound helps the reader to understand the story.
	IT1	I understand that sound can be recorded and stored on a computer.

White Laith Primary School Computing Achievement statements – (What we intend to teach.)

Lower Key Stage 2	IT3	I understand that sounds can be manipulated and edited to get a desired effect / outcome.
	DL5	I understand that copyright exist on most recorded music.
	IT3	I understand the style of music and type of sound effect used can affect who successful my work communicates with the audience.
	DL5	I understand the issues relating to copyright when choosing music samples and files and applying these to my work.

	POS	**Text, Graphics and Multimedia (Skills)**
Key stage 1	IT1	I can move the mouse pointer around the screen to a desired location.
	IT1	I can click left button to select an item on screen.
	IT1	I can use the mouse to drag objects to desired location and labels to label an on-screen picture.
	IT1	I can use the keyboard to create labels and print out them out for a purpose.
	IT1	I can add captions to photographs or graphics and print out work.
	IT1	I can use of the keyboard spacebar, backspace, delete, shift, caps lock and enter keys.
	IT1	I can save, print, retrieve and amend work.
Lower Key Stage 2	IT1	I can resize, crop, and orientate, images I have added to my work from clipart folders.
	IT1	I can select text by highlighting or clicking and change the size, font and colour of the text.
	IT3	I can add text and graphics to pages to create simple presentations for different purposes.
	IT3	I can use different font sizes, colours and effects to communicate meaning for a given audience.
	IT3	I can use cut, copy and paste to refine and reorder content.
	IT3	I can use spell checker, to ensure my work is error free.
Upper Key Stage 2	IT3	I can show consistency across a presentation using the same styles of font, colour, size for headings, body text, etc.
	IT3	I can link pages using hyperlinks to create a non-linear, interactive presentation.
	IT3	I can suggest improvements to make my work more relevant to the intended audience.
	IT3	I can use transitions and animations to show I have considered their appropriateness and overall effect on the audience.
	IT3	I can independently find, select, and import images, video and sounds to enhance presentations.

		Text, Graphics and Multimedia (Knowledge and Understanding)
Key stage 1	IT1	I know to click the left mouse button to select.
	IT1	I know to click the right mouse button to show a menu to choose from.
	IT1	I know that text can be different colours, sizes and styles and these can easily be changed.
	DL1	I know that multimedia includes sound, text and graphics.
LKS2	IT3	I understand that evaluation and improvement are vital parts of the design process.
	IT3	I understand the need consider the intended audience in my work when designing.
Upper Key Stage 2	DL5	I understand that images and text can be subject to copyright and abide by copyright rules when creating a presentation.
	IT3	I understand the importance of evaluation and adaptation of individual features to enhance an overall presentation.
	IT3	I recognise the features of good page design in posters and multimedia presentations and can talk about design in the context of my own work.
	IT3	I understand the potential of multimedia to inform or persuade and consider how to integrate words, images, and sounds imaginatively for different audiences and purposes

	POS	**Video and Animation (Skills)**
Key stage 1	IT1	I can add simple animation to images in "2create-a-story".
	IT1	I can independently use an iPad camera to capture, save, review and film clips.
	IT1	I can independently use an iPad to capture, save, review and delete photographs.

White Laith Primary School Computing Achievement statements – (What we intend to teach.)

	IT1	I can create a short animation by drawing a sequence of images using 'onion skinning'.
Lower Key Stage2	IT1	I can use an iPad to capture, save, review and delete film clips.
	IT3	I can talk about and evaluate the quality of my own and others' photographs and make decisions whether to keep, delete or re-take them.
	IT3	I can create a short animation using stop animation technique.
	IT3	I can import music, sound effects, and recordings in to animation software for a specific project.
	IT3	I can add titles, captions, credits and special effects, e.g., transitions, slow motion, text animation, for the intended audience.
Upper Key Stage 2	IT3	I can arrange, trim and cut clips to create a short film that conveys meaning.
	IT3	I plan and create a short-animated sequence to communicate a specific idea, using storyboard and timeline.
	IT3	I can add titles, captions, credits and special effects, e.g., transitions, slow motion, text animation, for the intended audience.
	IT3	I can export movies in formats appropriate for purpose and use them in multimedia presentations.
		Video and Animation (Knowledge and Understanding)
Key stage 1	IT1	I understand adding simple animation to images helps the audience understand the story.
		I understand that animation is a sequence of still images.
	IT1	I understand that sometimes I need to hold a video camera very still when filming and sometime I can move the video camera when filming to achieve the desired outcome.
	IT1	I understand why we say 'action' and 'cut' when filming actors.
LKS2	IT3	I understand "onion skinning" and how it enables me to improve the quality of my animation.
	IT3	I understand the basic video camera shots, such as, close up, head and shoulders, pan, zoom and wide shot.
	IT3	I understand that evaluation and improvement are vital parts of the design process and ICT allows changes to be made quickly and efficiently.
UKS2	IT3	I understand why a story board is a vital part of the film making process.
	IT3	I understand the shot type a choose to film can communicate meaning to the audience.
	DL5	I understand the implications of copyright and apply this to my work when creating films.
	IT3	I understand a film project must be saved/converted to a mp4 file, a format that can be easily shared.