Lostwithiel Community Primary School Key Skills for ICT

Year	Finding things out	Developing ideas and making things happen	Exchanging and sharing information	Reviewing, modifying and evaluating work	E Safety	Topic & term taught/ covered
FS	**Data Handling** I can collect information on tally charts and tables with help. I can begin to sort. I can produce simple pictograms with help **Research/multimedia and Internet** I can drag and drop an object using a mouse. I can access a bookmarked website. I can explore a website.	**Control and Sensing** I can use the arrow keys to control simple games. I can make a programmable toy move by giving it instructions. I can explore and talk about different electronic toys that can be controlled e.g. scanner, till. **Modelling and Simulations** I can use a simple adventure programme to make things happen on the screen. I can use a mouse.	**Communication** I can find letter and number keys on a keyboard. I can type my name to make a label. I can choose and paint with different colours. I can choose different brush sizes and styles. E.g. spray.	**ICT in the Wider World** I can find things that use ICT in my own environment e.g. telephones/tape recorders/CD players/washing machines. I understand that ICT is not just computers.	I can talk about the impact of good choices and consequences of wrong ones. I know my password belongs only to me. I can use a password to access learning spaces. I make sure an adult is present when using the Internet. I can talk about the differences between real and imaginary experiences. I can talk about correct behaviour when using ICT equipment.	
1	**Data Handling** *Do I know information exists in different forms? E.g. as part of work on a traffic survey children interpret a pictogram.* (5a) I can interpret a pictogram. (1a) I can create pictograms or bar charts with support. (1a) I can print graphs. (1a) **Research/multimedia and Internet** *Explore information from different sources. E.g. using a simple topic based resource (web/CD)*	**Control and Sensing** *Give and record individual instructions and make things happen. E.g. press buttons to control a robot or programmable toy.* I can programme a Roamer/BeeBot to move forwards/backwards and make it turn. (2c and 5b) I can follow instructions to complete a task. (2c) I can control the pointer on a screen by using a simple LOGO programme. (2c and 2d) **Modelling and Simulations**	**Communication** *Communicate and present their ideas using digital images, text and sound. E.g. take photographs of riding a bike, add a caption and or voice recording.* (3b) I can use two hands to control the keyboard.(2a) I can save and retrieve my work. (2b and 1c) I can sometimes use upper and lower case letters. (2a) I can use the spacebar, return, delete and shift keys.(2a) I can start to change the font, colour and size of my writing. (2a)	**Evaluating** I can tell you what I have produced and why. (4a) I can tell you why something has happened. (4b) I can tell you what I might change next time. (4c) **ICT in the Wider World** I can tell you different ways ICT is used in the wider world. E.g. keyboard in shops and restaurants. (5c)	I can talk about what personal information is and who I can share it with. I can explain why it is important to know who it is I am sharing my learning with online. I can recognise the difference between real and imaginary online experiences. I make sure an adult knows what I am doing online. I can keep my passwords a secret and explain why it is important to. I can talk about what is good to put online and what should be kept private.	

	I can use the favourites menu to find the website I want. (1a) I can load a CD-ROM disc and run it with support. (1a and 1b) I can use 2simple to add text to pictures (3a and 5b).	*Explore options and make choices. E.g. children explore cause and effect by using different colours in a portrait to reflect different ways they feel.* I can use the arrow keys to move around a programme's environment, understanding the consequences of making different decisions. (2d) I can load an adventure simulation or programme on my own. (2d and 5b)			I can close pop up windows when exploring online resources.. I know what I can do if I see something I don't like on a website (tell an adult, Hector) I can use a password independently. **Copyright** I can explain why I might not be able to copy pictures and words from the internet. (they belong to someone else)	
2	**Data Handling** *Collect, organise and classify data. Create graphs and use these to answer questions. E.g. Collecting and analysing class based data about themselves.* (5a) I can enter simple information into a data plotting or graph programme like 2simple. (1b and 3a) I can change the type of graph. (2a and 3a) I can load databases and files with support. (1c) I can search a prepared database with support. (1a) **Research/multimedia and Internet** *Ask a range of questions about the information they have gathered e.g. asking questions about information found on a website.* I can save, retrieve and print out graphics and text combined. (1c) I can use the index or menu to find information on a CD-ROM. (1a) I can enter keywords into a search engine to find the information I want. (1a)	**Control and Sensing** *Predict, estimate and create a set of instructions to control devices and achieve specific outcomes. E.g. control a floor robot to move between two or more fixed points involving distance and turn.* I can control a Roamer/BeeBot to follow a route or create a shape. (2c, 2d and 5b) I can make the Roamer repeat the same series of movements until it is edited, cleared or switched off. (2c) I can load a logo programme on screen. (1c) I can use simple logo instructions.e.g. forward, back, left, right. (2c) **Modelling and Simulations** *Use ICT to explore real and imaginary situations. E.g. children answer what if questions using a visual simulation of dressing a character for different sorts of weather.* I can show how to save and reload the current position	**Communication** *Know how to express their ideas using a range of ICT tools. E.g. children create a presentation about their walk around the local area.* (3b and 5a) I can delete single letters and words using the delete/backspace keys. (3a) I can use the rubber, fill and shape tools on a simple graphics programme.(3a) I can use the undo button to correct mistakes. (3a) I can use a range of tools to produce different effects. (2a) I can add a sound to a picture. (2a) I can share my work with an audience. (3b)	**Evaluating** I can tell you what I have produced and why. (4a) I can tell you why something has happened. (4b) I can tell you what I might change next time. (4c) **ICT in the Wider World** I can talk about how robots similar to Roamer are programmed to work in factories to do the same task over and over again. I can talk about how word processing is used in offices e.g. newsletters. (5c)		

		in an adventure programme. (2b) I can use a Roamer or other device as a simulation e.g. postman delivering mail. (2d) I can explore real and imaginary simulations answering what if questions. (2simple – talking stories) (2d)				
3	**Data Handling** *Identify and develop a way of collection and collect appropriate data.* I can load a prepared database and/or graphing programme. (1a) I can enter data into a prepared database. (1b) I can sort data (by numerical or alphabetical order, within a heading). (1b) I can search a prepared database on CD ROMS and the internet to answer specific questions. (1a) I can save and retrieve an amended database. I can print and record a table and/or graph. **Research/multimedia and Internet** *Find specific information using a range of ICT based resources e.g. Viking boat making.* I can load a multimedia programme. (1a) I can combine graphics (e.g. clipart, Internet pictures, photo's, scanned images, tables, graphs etc) with text with support. (1b and 2a) I can use email with support. (3a)	**Control and Sensing** *Predict and test short sequences of linked instructions to achieve intended outcomes. E.g. use a floor robot to navigate a floor map.* I can use Roamer with greater independence and create more complex routes to include the use of other commands such as repeat, end and pause. (2b) I can attach a pen to draw simple patterns or shapes. (2b) I can store (save) retrieve and modify procedures in a Roamer. (2b) I can write, test and modify a series of LOGO instructions to control a floor robot or screen pointer. (2b) **Modelling and Simulations** *Understand that they can explore a simulation and use this to change things and solve problems by indentifying the rule. E.g. children use a function machine in maths to demonstrate a model exploring input and outputs (rules and variables)* I can save my group's	**Communication** *Record and present information integrating an appropriate range of electronic media for a given audience. E.g. children create a presentation linked to a narrative unit of work. (3a)* I can import graphics onto a word processor page and add text, then print out as a single piece of work. (2a) I can underline text. I can edit on screen and move the cursor to speed up the process. I can justify/align text. I can highlight blocks of text, then edit by deleting, moving, altering font, style, size. (2a) I can present information in a variety of ways including, posters, animations, musical compositions (3a) I can think of the intended audience when presenting information. (3b)	**Evaluating** I can tell you what I have produced and why. (4a) I can tell you why something has happened. (4b) I can compare the advantages and disadvantages of different software. (4b) I can tell you what I might change next time. (4c) **ICT in the Wider World** I can consider how information is stored and shared around the school. (5c) I can talk about the dangers of sharing personal information over the internet. I can talk about the need for responsible us of ICT e.g. email/mobile phones.	I can explain the need for rules to keep me safe when exchanging ideas online. I understand any information I put online can be seen and used by others. I make sure an adult knows what I am doing online. I can keep my passwords a secret and explain why it is important to. I can talk about the different communication tools e.g. forums, instant messaging and e-mail. I can explain when an email should not be opened and why. I can describe some of the risks and rewards of the internet. I an explain how to behave on the internet to protect myself. I know what I can do if I see something I don't like on a website or someone tries to make contact that I don't know. (tell an adult, Hector) I can choose appropriate images and details to share online. **Copyright** I understand the need to identify whether material	

	I can use appropriate tools to save and retrieve accessed information e.g. favourites, history.	position in an adventure or simulation programme independently. (2c) I can retrieve the saved file for subsequent use. (2c) I can use the simulation to answer "what if….." questions. (2c) I can explore the effects of changing variables in models and simulations. (2b and 2c)			can be shared before using it in my work. I can ask permission of someone to use content they have created. I can recognise whether content on a website can be used without asking fro prior permission.	
4	**Data Handling** *Children to collect, organise, classify and interpret data in order to answer a question and develop a simple database. E.g. construct a yes/no database to classify minibeasts.* I can present data and/or search results graphically (bar chart, pictogram, pie chart) (1b) I can amend errors. (1c) I can indentify opportunities for data collection. (1a) I can identify headings (fields) for data collection. (1b) I can create a database structure and enter data. (1b) I can interpret, amend and/or delete data from records. (1c) **Research/multimedia and Internet** *Follow straight forward lines of enquiry. E.g. children can find out information about diets in the Roman times.* I can combine graphics and text independently. (2a)	**Control and Sensing** *Investigate physical data through sensing data. E.g. investigate temperature changes overnight.* I can use trial and error to create the correct sequence of instructions. (2b) I can save and retrieve a LOGO procedure. (2b) I can predict the outcome of a series of instructions, a procedure and amend the process as necessary. (2c) I can print a LOGO procedure and it's effects. I can incorporate PEN UP PEN DOWN to produce more complex designs. (2b) **Modelling and Simulations** *Present media from simulation programmes by either printing or importing into another programme.* I can export text and graphic files from an adventure or simulation programme for use in other programmes e.g. word processor multimedia. (2c) I can print screen information as required. (3a)	**Communication** *Design and create their own multimedia presentation showing awareness of audience. E.g. children produce a presentation for younger children in the properties of shape, explaining and justifying their decisions.* I can alter the organisation of my document using cut, copy, paste, drag and drop. I can combine graphics (pictures/graphs/tables) and text. (2a) I can use a word list/bank facility to include topic groups of words. I can use the print options to say how many copies or what part of the document to print. I can think of the intended audience when presenting information. (3b) I can present information in a variety of ways including, posters, animations, musical compositions (3a)	**Evaluating** I can tell you what I have produced and why. (4a) I can tell you why something has happened. (4b) I can compare the advantages and disadvantages of different software. (4b) I can tell you what I might change next time. (4c) **ICT in the Wider World** I can talk about CCTV being used in security systems. I can find examples of ICT in my own life – calculators/digital cameras/mobile phones/television/fax's/email etc (5c)		

	I can load, explore, save and print CD ROM materials independently and export files with support. (1a) I can use a range of search engines to locate different media e.g. image search, search with a specific site or searching the wider internet. (1a)					
5	**Data Handling** *Use ICT to collect and process data and present their findings in order to solve a problem. E.g. children investigate the difference between the life expectancy of children in Victorian and modern times.* I can use a more complex database programme to extend my skills. (Microsoft excel) (1b) I can prepare a data collection form and collect quality information by framing the questions carefully. (1a and 1c) I can carryout complex searches with databases. (1a) **Research/multimedia and Internet** *Analyse information gathered and present findings in a presentation.* I can use digital camera/photo CD images. (2a) I can add prepared sounds/music/video etc to a multimedia presentation. (2a) I can save and retrieve my presentation. I can print various screens from my presentation. I can use a CD ROM	**Control and Sensing** *Refine instructions to improve the efficiency (procedure) of the instructions they have created. E.g. use a sequence of instructions using "repeat" to control a set of traffic lights.* I can use a control programme to produce a single outcome (switch on a light/turn on a motor) (2b) I can understand how to write instructions using a language that the control understands e.g. switch on/switch off. (2b) I can use a wider range of instructions e.g. delay, repeat) (2b) I can use a wider range of outputs in my procedures e.g. motors. (2b) **Modelling and Simulations** *Use ICT based models to explore variables to solve problems. E.g. use a pre-prepared spreadsheet to calculate the cost of ingredients for biscuits. Children answer questions about price or quality changes.* I can start a new spreadsheet and input data making use of row and	**Communication** *Design and create and evaluate their own presentations maximising the use of ICT to present information in different ways. E.g. children create a presentation about their school for the community justifying their choice of medium and content.* I can think of the intended audience when presenting information. (3b) I can present information in a variety of ways including, posters, animations, musical compositions (3a) I can develop the use of spell checking facilities. I can use print preview. I can alter page set up between landscape and portrait. I can alter my page size so I am able to view the whole page.	**Evaluating** I can tell you what I have produced and why. (4a) I can tell you why something has happened. (4b) I can compare the advantages and disadvantages of different software. (4b) I can tell you what I might change next time. (4c) **ICT in the Wider World** I can talk about the issues surrounding cyber bullying. I can talk about what I would do if I saw something I didn't like on the internet.	I can talk about inappropriate and appropriate use of the internet. I can discuss the risks and rewards of using internet communication tools and how I can protect myself. I can use a social networking website appropriately, making sure I keep an adult informed of what I am doing. I can discuss the consequences of sharing personal details online e.g. in a chat room and how I should respond when I might be asked for those details. I can use the internet in ways which minimize risks. I can discuss the consequences of trusting information and people on the internet. **Copyright** I can recognise the material on the internet which belongs to someone else and can be downloaded to use in my own work. I can acknowledge when I use someone else's content in my own work..	

	independently. (1a)	column headings. (2a) I can retrieve a previously saved spreadsheet. (2a) I can name and save a spreadsheet. (2a) I can insert and delete rows and columns. (2a) I can use the SUM function (2a). I can predict the outcome of actions. (2a) I can alter column widths and row heights within spreadsheets. (2a) I can change data to ask and answer "what would happen if…" questions. (2c) I can use mirror/flip and or rotational tools to transform 2d shapes and create patterns.				
6	**Data Handling** *Generate, process, interpret, store and present data, understanding the need for accuracy.* I can check for plausibility – checking for quality information and data that provides necessary information. (1c) I can present 2 or more sets of data on the same graph – scattergrams with overlays. (2a) I can talk about the difference between line graphs for continuous data and pie/bar charts for discrete data. (1c) I can decide on the best graphic form for the data and discuss the reasons why. (1c) I can organise, refine and present information appropriate to the audience. (3b)	**Control and Sensing** *Create a sequence of instructions to control events. E.g. controlling temperature.* I can develop the use of a control box to include procedures that can be saved, retrieved and edited using a series of devices. (2b) I can use one or more sensors (inputs) to detect and display changes of state e.g. temperature, light gate, pressure pad. (2b) I can display this data as a graph and interpret the results and print the display. (1b, 1c and 3a) I can create systems that model real life control or monitoring situations (traffic lights, burglar alarms, temperature sensors) (2b)	**Communication** *Communicate information having made choices about the appropriate medium, content and structure demonstrating an understanding of audience and purpose. E.g. presentation of a DT project such as building a fairground to potential theme park developers.* I can use a desktop publishing programme with frames, resizing text blocks and pictures to suit a document. (2a and 3a) I can organise information within text boxes. I can use all the above skills to present work in a style suitable to the audience. (3b)	**Evaluating** I can tell you what I have produced and why. (4a) I can tell you why something has happened. (4b) I can compare the advantages and disadvantages of different software. (4b) I can tell you what I might change next time. (4c) **ICT in the Wider World** I can talk about the importance of data protection and security issues arising from internet use. I can talk about using the internet to book holidays, buy items, listen to music and watch sporting events. I can talk about the unsuitability of some internet material for		

	Research/multimedia and Internet *Present findings in a variety of ways taking into account their audience.* I can plan the layout of the screens and structure of the presentation using a storyboard approach (animation/filming). (2a) I can use a range of multimedia in my presentations. (3a) I can link the screen together using buttons and images. (2a) I can use a range of transition/effects to move between screens (powerpoint). (2a) I can bookmark a useful website/add a useful site to my favourites. (1a)	I can predict the effect of changing a variable (is the sun shining?) (2c) **Modelling and Simulations** *Add and amend a given ICT model to solve a problem through a review of the rules and variable. E.g. children explore the relationship between area and perimeter using a spread sheet.* I can use formulae and functions in spreadsheet cells. (2c) I can look for relationships and patterns in spreadsheets. (2c) I can explore equations with a spreadsheet. (2c) I can produce a graph from data on a spreadsheet. (2a) I can export text and graphic files to other programmes independently. (2a)		children.		