Beaufront First School Progression of Skills in Computing   (July 2021)
from the http://sheffieldclc.net/sheffield-primary-computing-progression-framework/   2020 v2

(NB above and beyond Early Learning Goals – can be used to assess pupils working below age expectations in KS1)

Year group	What is a computer? Key skills	Presenting information and multimedia	Data	Programming and Algorithms
Found ation	Use different digital devices. Recognise that you can access content on a digital device. Use a mouse, touchscreen or appropriate access device to target and select options on screen. Recognise a selection of digital devices. Recognise the basic parts of a computer, e.g. mouse, screen, keyboard. Select a digital device to fulfil a specific task, e.g. to take a photo.	Use technology to explore and access digital content. Operate a digital device with support to fulfil a task. Create simple digital content, e.g. digital art. Choose media to convey information, e.g. image for a poster.	Access content in a range of formats, e.g. image, video, audio. Answer basic questions about information displayed in images e.g. more or less.	Explore technology. Repeat an action with technology to trigger a specific outcome. Recognise the success or failure of an action. Follow simple instructions to control a digital device. Recognise that we control computers. Input a short sequence of instructions to control a device.

Foundation Digital Literacy	
Are aware that some online content is inappropriate. Are aware that information can be public or private.	Know to tell an appropriate adult if they see something on the computer that upsets them.

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1-	Recognise a range of digital devices. Select a digital device to fulfil a specific task, e.g. to take a photo. Name a range of digital devices, e.g. laptop, phone, games console. Log on to the school computer / unlock the school tablet with support. Identify the basic parts of a computer, e.g. mouse, keyboard, screen. Use a suitable access device (mouse, keyboard, touchscreen, switch) to access and control an activity on a computer. Open key applications independently. Save and open files with support. Add an image to a document from a given folder/source with support.	Create digital content, e.g. digital art. Choose media from a selection (e.g. images, video, sound) to present information on a topic. Recognise that you can find out information from a website. Recognise that you can edit digital content to change its appearance. Select basic tools/options to change the appearance of digital content, e.g. filter on an image / font / size of paintbrush. Combine media with support to present information, e.g. text and images	Recognise different forms of digital content, i.e. text, image, video and audio. Collect simple data (e.g. likes/dislikes) on a topic. Present simple data using images, e.g. number of animals. Recognise charts and pictograms and why we use them. Explain information shown in a simple chart or pictogram. Modify simple charts/pictograms, e.g. add title, item or labels. Identify the key features of a chart or pictogram. Collect data on a topic (eye colour, pets etc.) and present in a pictogram or chart.	Recognise that computers don't have a brain. Explain that we control computers by giving them instructions. Create a simple program e.g. to control a floor robot. Create a simple algorithm. Predict the outcome of a simple algorithm or program. Explain what an algorithm is – a sequence of instructions to make something happen. Recognise that the order of instructions in an algorithm is important. Debug an error in a simple algorithm or program e.g. for a floor robot.

Year 1 Digital Literacy	
Use a simple password when logging on, where relevant. Explain why we use passwords. Recognise examples of personal information e.g. name, image.	Know who to tell if concerned about content or contact online. Recognise that digital content belongs to the person who created it. Talk about their use of technology at home.

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2	Recognise what a computer is (input > process > output). Recognise that a range of digital devices contain computers, e.g. phone, games console, smart speaker. Explain what the basic parts of a computer are used for. Identify and use input devices, e.g. mouse, keyboard; and output devices, e.g. speakers, screen. Open key applications independently. Save and open files to/from a given folder. Add an image to a document from a given folder/source. Resize an image in a document. Highlight text and use arrow keys. Capture media independently (e.g. take photos, record audio).	Create simple digital content for a purpose, e.g. digital art. Recognise that we can use technology to record and playback audio or take and view photographs. Apply edits to digital content to achieve a particular effect, e.g. emphasise part of a text. Present ideas and information by combining media, e.g. text and images. Explain that you can search for information on the internet. Plan out digital content, e.g. a simple sketch or storyboard. Identify the common features of digital content, e.g. title, images. Recognise that we can use different types of media to convey information, e.g. text, image, audio, video.	Identify different forms of digital content, i.e. text, image, video and audio. Recognise charts, pictograms and branching databases, and why we use them. Identify an object using a branching database Recognise an error in a branching database. Create a branching database using pre-prepared images and questions Identify the features of a good question in a branching database. Independently plan out and create a branching database. Evaluate a given branching database and suggest improvements	Explain that computers have no intelligence and we have to program them to do things. Create a program with multiple steps e.g. to control a floor robot. Predict the outcome of an algorithm or program with multiple steps. Recognise that the instructions in an algorithm need to be clear and unambiguous. Identify and correct errors in a given algorithm or program, and recognise the term debugging. Explain what an algorithm is, and that when inputted on a computer it is called a program. Plan out a program by creating an algorithm, and evaluate its success.

Year 2 Digital Literacy	
Remember a simple password to log onto the computer or a website. Identify rules for acceptable use of technology in school. Recognise what personal information is and the need to keep it private.	Recognise that spending a lot of time in front of a screen can be unhealthy. Recognise that some information found online may not be true.

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3	Describe what a computer is (input > process > output). Explain the difference between input and output devices on a computer. Know where to save and open files (e.g. in shared folder). Save files with appropriate names. Use a keyboard effectively to type in text. Use left-, right- and double-click on the mouse. Add an image to a document from the internet. Resize and move an image in a document. Use a search engine to find simple information. Recognise that school computers are connected.	Present ideas and information by combining media independently, e.g. text and images. Design and create simple digital content for a purpose/audience, e.g. poster. Edit digital content to improve it, e.g. resize text. Identify the features of a good piece of digital content. Explain why we use technology to create digital content. Recognise why we use different types of media to convey information, e.g. text, image, audio, video.	Recognise charts, pictograms and databases, and why we use them. Present information using a suitable chart Explore a record card database to find out information. Use filters in a database to find out specific information. Name the key parts of a database, e.g. record, field, search. Answer questions about information in a database. Name some benefits of using a computer to create charts and databases. Recognise that search engines store information in databases.	Predict the outcome of a block or textbased program (Scratch/Logo). Successfully modify an existing program, e.g. change background, number of times things happen. Identify repeated steps in a program or algorithm. Create examples of algorithms containing count-controlled loops. Use a count-controlled loop (e.g. repeat 3 times) to make a program more efficient. Recognise that we can create an algorithm to help plan out a program. Recognise a forever loop in a program or algorithm. Use a forever loop in a program to keep something happening. Identify errors in a block or text-based program and correct them. Recognise that different inputs can be used to control a program.

Year 3 Digital Literacy	
Explain why we need to keep our password safe. Recognise that digital content belongs to the person who first created it, but we can give permission for others to use it.	Recognise when to share personal information and when not to. Recognise that some people lie about who they are online. Are aware that games and films have age ratings.

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4	Recognise that you can organise files using folders.

Explain what a good file name would look like.

Delete and move files.

Use key parts of a keyboard effectively, e.g. shift, arrow keys, delete).

Know how to copy and paste text or images in a document.

Crop an image and apply simple filters.

Use a search engine to find specific information.

Recognise that school computers are connected together on a network. | Collect, organise and present information using a range of media.

Design and create digital content for a specific purpose, e.g. poster, animation.

Edit digital content to improve it according to feedback.

Identify the features of a good piece of digital content and apply these in own design.

Explain the benefits of using technology to present information.

Know where to find copyrightfree content, e.g. creative commons images.

Collaborate with peers using online tools, e.g. blogs, Google Drive | Draw conclusions from information stored in a database, chart or table.

Design a questionnaire and collect a range of data on a theme.

Choose appropriate formats to present data to convey information.

Recognise that school computers are connected together on a network.

Recognise that the Internet is made up of computers and other digital devices connected together all around the world.

Know that you use a web browser to access information stored on the internet.

Appreciate that you need to use specific software to work with video, images, audio etc. | Create a program using a range of events/inputs to control what happens.

Recognise that we can decompose a problem into smaller parts to help solve it.

Explain when to use forever loops and count-controlled loops, and use them in programs.

Recognise selection in a program or algorithm.

Use selection in algorithms in programs to alter what happens when a condition changes, e.g. if…then…

Design a program for a purpose. Decompose into parts and create an algorithm for each one.

Recognise common mistakes in programs and how to correct them. |

Year 4 Digital Literacy	
Remember and use an individual password.

Recognise what kinds of websites are trustworthy sources of information. | Recognise the benefits and risks of different apps and websites.

Recognise that the media can portray groups of people differently.

Can rate a game or film they have made and explain their rating. |