Nursery and Reception	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Key Skills Strand 0 ([Sheffield elearning Service](#))	Ensure children's '**school readiness**' and '**give them a broad range of knowledge and skills that provide the right foundation for good future progress through school and life**' - Statutory Framework for EYFS September 2021. Computational Thinking ideas Rationale from Barefoot Computing [here](#)					
- 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.	**Barefoot Computing-** [Awesome Autumn](#) **Technology around us** [https://www.ilearn2.co.uk/computerdiscoveryfree.html](#) [http://code-it.co.uk/wp-content/uploads/2015/05/bankplan.pdf](#)	**Barefoot Computing-** [Winter Warmers](#)	**Barefoot Computing-** [Busy Bodies](#) **Music creation** [https://www.ilearn2.co.uk/freeyear1musiccreation.html/](#) [https://springroll-tc.pbskids.org/music-maker/d0f261dffc3c8f713fa5a22bb99d7f9afd04cb56/release/index.html](#)	**Barefoot Computing -** [Springtime](#) **Cooking** Jam sandwich [http://swaygrantham.co.uk/wp-content/uploads/2016/09/JamSandwichAlgorithm.pdf](#) Pizza [https://www.barefootcomputing.org/docs/default-](#)	**Barefoot Computing-** [Boats Ahoy](#) **Art** [https://www.j2e.com/jit5](#) [Art and algorithms](#)	**Barefoot Computing-** [Summer Fun](#) **Other ideas** [Lego Building](#) [Crazy Characters](#) [Head, Shoulder, Knees and Toes](#)

- Select a digital device to fulfil a specific task, e.g. to take a photo.	http://code-it.co.uk/wp-content/uploads/2015/05/supermarketplan.pdf http://www.crickweb.co.uk/Early-Years.html https://www.nurseryworld.co.uk/News/article/ict-in-role-play-check-it-out		https://musiclab.chromeexperiments.com/Voice-Spinner/	source/at-home/pizza_party_activity.pdf?sfvrsn=154d91ea_2		

KS1	NC Objectives

Computing **IT** **Digital Literacy**	Pupils should be taught to: ● understand what algorithms are, how they are implemented as programs on digital devices, and that programs execute by following precise and unambiguous instruction ● create and debug simple programs ● use logical reasoning to predict the behaviour of simple program ● use technology purposefully to create, organise, store, manipulate and retrieve digital content ● recognise common uses of information technology beyond school ● use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.					
Yr 1 and 2 **Cycle A** **22-23**	**Technology Around Us (Y1)** **Logging on** https://teachcomputing.org/curriculum/key-stage-1/computing-systems-and-networks-technology-around-us https://www.abcya.com/games/find_the_tech Hello Ruby	**Digital Painting (Y1)** https://teachcomputing.org/curriculum/key-stage-1/creating-media-digital-painting https://www.j2e.com/jit5 Y1) https://www.tate.org.uk/kids/games-quizzes/tate-paint	**Moving a robot (Y1) (Cross curricular with Beebots)** https://www.bbc.co.uk/bitesize/topics/z3tbwmn/articles/z3whpv4 https://teachcomputing.org/curriculum/key-stage-1/programming-a-moving-a-robot Plus Lesson 1, 2 and 3 https://teachcomputing.org/curricul	**Book Creator(Linked to topic)** https://www.commonsense.org/education/lesson-plans/using-technology-to-enhance-an-all-about-me-book#1 https://www.commonsense.org/education/lesson-plans/creating-nonfiction-books-about-animals-in-book-creator	**Introduction to Animation (Y1)** **https://teachcomputing.org/curriculum/key-stage-1/programming-b-introduction-to-animation** **Scratch Jr** Barefoot Computing Scratch Jr https://www.barefootcomputing.org/resources/scratchjr-tinkering-activity Scratch Jr Knock Knock	**Pictograms (Y2)(Cross Curricular)** https://teachcomputing.org/curriculum/key-stage-1/data-and-information-pictograms https://www.ilearn2.co.uk/free--year-2-data-handling.html https://toytheater.com/category/m

keyboard https://www.helloruby.com/play/12 Paper computer http://www.helloruby.com/play/29	Tuxpaint.org (Y2)	um/key-stage-1/programming-a-robot-algorithms Barefoot Computing https://www.barefootcomputing.org/resources/bee-bots-basics-activity **Apps** https://apps.apple.com/gb/app/bee-bot/id500131639 Web https://beebot.terrapinlogo.com/	**Digital Writing (Y1) (Cross curricular)** https://teachcomputing.org/curriculum/key-stage-1/creating-media-digital-writing Web- https://www.j2e.com/jit5 Project Evolve https://projectevolve.co.uk/toolkit/resources/years/year-one/copyright-and-ownership/	https://www.barefootcomputing.org/resources/scratchjr-knock-knock-joke-activity **An introduction to quizzes(Y2)** https://teachcomputing.org/curriculum/key-stage-1/programming-b-an-introduction-to-quizzes	ath-games/graphing/

| Yr 1 and 2 Cycle B 23-24 | **IT Around Us (Y2)**

Logging on

https://www.abcya.com/games/find_the_tech

https://teachcomputing.org/curriculum/key-stage-1/computing-systems-and-networks-it-around-us

or

PM- Unit 1.9 Technology Outside School | **Making Music** (Y2)
https://teachcomputing.org/curriculum/key-stage-1/creating-media-making-music

https://www.ilearn2.co.uk/freeyear1musiccreation.html

Song Maker

Incredibox

http://www.isleoftune.com/ | **Moving a robot** (Y1) (Cross curricular and ideally with an alternative to Beebots such as ozobots, Clementoni Mind robots or Rugged robots)

https://teachcomputing.org/curriculum/key-stage-1/programming-a-moving-a-robot

Plus Lesson 1, 2 and 3
https://teachcomputing.org/curriculum/key-stage-1/programming-a-robot-algorithms

Apps
A.I.E.X | **Book Creator(Linked to topic)**
https://www.commonsense.org/education/lesson-plans/using-technology-to-enhance-an-all-about-me-book#1

https://www.commonsense.org/education/lesson-plans/creating-nonfiction-books-about-animals-in-book-creator

Focus on Digital Photographs (Y2) (Cross curricular)

https://teachcomputing.org/curriculum/key-stage-1/creating-media-digital-photography | **Programming**

Dance Unplugged - https://curriculum.code.org/hoc/unplugged/4/

Dance Unplugged - https://www.barefootcomputing.org/resources/dance-move-algorithms and Computational Thinking - https://www.barefootcomputing.org/resources/decomposition-unplugged-activity-ks1 | **Pictograms (Y2)(Cross Curricular)**

https://teachcomputing.org/curriculum/key-stage-1/data-and-information-pictograms |

				Digital Writing (Y1) (Cross curricular) https://teachcomputing.org/curriculum/key-stage-1/creating-media-digital-writing Web- https://www.j2e.com/jit5		

KS2	NC Objectives
Computing IT **Digital Literacy**	Pupils should be taught to: - design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts - use sequence, selection, and repetition in programs; work with variables and various forms of input and out - use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs - understand computer networks, including the internet; how they can provide multiple services, such as the World Wide Web, and the opportunities they offer for communication and collaboration

Yr 3/4 Cycle A 22-23 Sheffield http://sheffieldclc.net/sheffield-primary-computing-progression-framework/	**(Creating media-Branching database (Cross curricular))** https://teachcomputing.org/curriculum/key-stage-2/data-and-information-branching-databases Jit5 Picollage app	**Programming-Sequence in music (Y3)** https://teachcomputing.org/curriculum/key-stage-2/programming-a-sequence-in-music Start with some tutorials https://scratch.mit.edu/projects/editor/?tutorial=getStarted Y4 Include a repeat or forever block or try the below tutorial https://projects.raspberrypi.org/e	**Creating media-desktop publishing Adobe Creative Express/ Canva (Cross curricular)(Y3)** https://teachcomputing.org/curriculum/key-stage-2/creating-media-desktop-publishing	**Programming-events and actions(Y3)** https://teachcomputing.org/curriculum/key-stage-2/programming-b-events-and-actions **https://studio.code.org/s/coursec-2020/stage/15/puzzle/1** Y4 Include a repeat or forever block	**Creating media- photo editing (Cross curricular)(Y4)** https://teachcomputing.org/curriculum/key-stage-2/creating-media-photo-editing **https://pixlr.com/x/**	**Creating media-stop-frame animation (Cross curricular)(Y3)** https://teachcomputing.org/curriculum/key-stage-2/creating-media-animation

		n/projects/butterfly-garden				

Project Evolve Year 3/4 units

Yr 3/4 Cycle B 23-23	**Systems and networks- The internet (Y4)** https://teachcomputing.org/curriculum/key-stage-2/computing-systems-and-networks-the-internet http://code-it.co.uk/netintsearch	**Programming-Repetition All do a tutorial(Y3-Animate a name. Y4 any)** https://scratch.mit.edu/projects/editor/?tutorial=getStarted https://teachcomputing.org/curriculum/key-stage-2/programming-b-repetition-in-games	**Creating media-desktop publishing Canva (Cross curricular)** https://teachcomputing.org/curriculum/key-stage-2/creating-media-desktop-publishing **Y4 skills Mr P ICT progression of skills**	**Programming-Repetition** https://teachcomputing.org/curriculum/key-stage-2/programming-a-repetition-in-shapes	**Creating media-Audio editing (Cross curricular)** https://teachcomputing.org/curriculum/key-stage-2/creating-media-audio-editing Using Garage Band or BandLab	**Creating media--Comic Creation (Cross curricular)** https://www.ilearn2.co.uk/comiccreationteacherfree.html https://www.makebeliefscomix.com/Comix/

Yr 5 and 6 Cycle A 22-23	Selection in quizzes(Y5) https://teachcomputing.org/curriculum/key-stage-2/programming-b-selection-in-quizzes	Creating media-Vector drawing (Y5) https://teachcomputing.org/curriculum/key-stage-2/creating-	Creating media-video editing (Cross curricular)(Y5) https://teachcomputing.org/curriculum/key-stage-2/creating-media-	Creating media-3D Modelling (Cross curricular)(Y6) https://teachcomputing.org/curriculum/key-stage-	Selection using Recap selection All Y5 https://projects.raspberrypi.org/e	Data and information-Spreadsheets (Y6) https://teachcomputing.org/curriculum/key-stage-2/data-and-

		media-vector-drawing	video-editing	2/creating-media-3d-modelling	n/projects/dodgeball	information-spreadsheets
	https://projects.raspberrypi.org/en/projects/dodgeball				**http://sheffieldclc.net/scratch-selection/** **Y6 {Score)** **https://projects.raspberrypi.org/en/projects/ghostbusters** **http://sheffieldclc.net/scratch-variables/** **Design own game**	

Project Evolve Year 5/6 units

Yr 5 and 6 Cycle B 23-24	Programming-Selection (Y5) https://teachcomputing.org/curriculum/key-stage-2/programming-b-selection-in-quizzes and Variables(Y6) https://teachcomputing.org/curriculum/key-stage-2/programming-a-variables-in-games	Creating media-Flat file databases(Y5) https://teachcomputing.org/curriculum/key-stage-2/data-and-information-flat-file-databases https://www.canyoucompute.co.uk/uploads/1/4/2/4/14249012/1_top_trumps_hw.pdf	Creating media-Web page design (Cross curricular)(Y6) https://teachcomputing.org/curriculum/key-stage-2/creating-media-web-page-creation	Systems and networks-Communication (Y5) (Cross curricular) Word/Google Docs https://teachcomputing.org/curriculum/key-stage-2/computing-systems-and-networks-sharing-information (Lessons 4, 5 and 6) Project evolve https://projectevolve.co.uk/toolkit/resources/years/5/managing-online-information/	Creating media-Vector drawing (Y5) https://teachcomputing.org/curriculum/key-stage-2/creating-media-vector-drawing	App design https://www.ilearn2.co.uk/appdesignfree.html/

Project Evolve Year 5/6 units