

Computing Curriculum Overview 2020/ 21

EYFS Objectives:

40-60 months

1. Completes a simple program on a computer.
2. Uses ICT hardware to interact with age-appropriate computer software.

Early Learning Goal

Children recognise that a range of technology is used in places such as homes and schools. They select and use technology for particular purposes.

Year Group	Autumn Term		Spring Term		Summer Term	
Reception	Autumn 1 Focus: Using Hardware; Interactive Whiteboard To use the board to engage in games and drawing.	Autumn 2 Focus: Using Hardware; instructional coding To program the codeapillars to move around the room. To change the sequence to get it to move in different directions.	Spring 1 Focus: Using Hardware; iPads Software; Seesaw & Chatterpix To use iPads to access; SeeSaw and use the drawing tool, annotate and use narration. Take pictures on Seesaw and annotate. Using Chatterpix – eg. take a picture of a shape and to record voice to explain understanding 'this is a shape, it has 4 equal sides'.		Summer Focus: Using Hardware; laptops Software; 2 simple programs To learn how to turn on/off, double click, use the mouse pad, draw using variety of colours, thickness and print.	
Early Years	Educational Visits/ Enrichment opportunities	National Initiatives Online Safety Day STEM Week	APP's to support topics 2Simple (laptops) Seesaw Chatterpix	School Resources available Laptops iPads Codeapillars	Resources to loan N.A	Links to Websites

Whole School Computing Curriculum Overview

National Curriculum Objectives:

1. 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.
2. recognise common uses of information technology beyond school
3. understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions.
4. create and debug simple programs
5. use technology purposefully to create, organise, store, manipulate and retrieve digital content

Year Group	Autumn Term		Spring Term		Summer Term	
Year 1	Autumn 1 Focus: Access Hardware Learning Objectives: 1, 5 To log on and access iPads and laptops. Ipads – Chatterpix, SeeSaw Keyboard skills (space, delete) Laptops Recap – Turn on/off use the mouse pad double click use 2simple programs (2paint, 2pattern)	Autumn 2 Focus: Algorithms Learning Objectives: 3, 4 Unplugged What is an Algorithm? To create a lego algorithm using seesaw, test and debug it. Evidence it. See Ks1 file for planning.	Spring 1 Focus: Digital Art Learning Objectives: 2, 5 Everyone Can Create – Photo Ch 1. Activity 1, 2, 3 then project.	Spring 2 Focus: Coding Learning Objectives: 3, 4 To use simple coding apps to begin to give instructions and understand that programs follow them exactly. Begin to debug. See Planning Apps Scratch Junior	Summer 1 Focus: To Create an Animation Learning Objectives: , 2, 5 What is an animation? To explain what a frame is. To create a frame and understand how to make it move. To copy and paste frames.	Summer 2 Focus: Multimedia Learning Objectives: , 2, 5 Use Seesaw to create a story – coverage: Drawing/photo Typing/dictation Adding shapes Adding audio
Year 1	Educational Visits/ Enrichment opportunities	National Initiatives Online Safety Day STEM Week	APP's to support topics 2Simple (laptops) Seesaw Beebot Daisy Dinosaur Kodable	School Resources available Laptops iPads Codeapillars Dash & Dot	Resources to loan	Links to Websites

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Year 2	Autumn 1 Focus: Document Creating and Editing Learning Objectives: 2, 5 I can type I can adjust text size, font, colour and position. I can use punctuation and finger spacing. I can add a picture. I can add a border. I can add bullet points. I can save and print.	Autumn 2 Focus: Internet Learning Objectives: 1, 2, 5 I understand what the internet is used for. I know how to access the internet. I can use a search engine to safe search. I can locate appropriate information. I can locate appropriate pictures. I know what to do if I come across something inappropriate. I can copy and paste pictures/text from the internet.	Spring 1 Focus: Coding Learning Objectives: 2, 3, 4, 5 I can explain what an algorithm is. I can give an example of an algorithm. I can create an algorithm I can identify 'bugs' in computer programs. I can fix a 'bug' and explain how I did it. I can use loops to repeat code. See planning file.		Summer 1 Focus: Movie Making Learning Objectives: 1, 2, 5 I can discuss which videos to keep and why. I can arrange clips to make a short film that conveys meaning. I can add simple titles and credits. Select text and make simple changes including bold, italic and underlined.	Summer 2 Focus: Digital Sound Learning Objectives: 2, 5 I can access a simple music program (Music toolkit on 2simple) to create sounds. I can create beats using Garageband. I can create a soundtrack for an image. I can create audio recordings I can manipulate audio recordings I can apply the audio recordings to a picture.
Year 2	Educational Visits/ Enrichment opportunities	National Initiatives Online Safety Day STEM Week	APP's to support topics Scratch Hopscotch	School Resources available iPads, laptops, Everyone Can Create eBooks	Resources to loan	Links to Websites https://studio.code.org/g/coursea-2019

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Whole School Computing Curriculum Overview

1. design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts
2. use sequence, selection, and repetition in programs; work with variables and various forms of input and output
3. use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs
4. 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
5. use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content
6. select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information
7. use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.

Year Group	Autumn Term		Spring Term		Summer Term	
Year 3	Autumn 1 Digital Art Everyone Can Create Drawing – Ch 1	Autumn 2 Focus: Movie Making Learning Objectives: Everyone Can Create Video Ch 1 and 2 I can discuss which videos to keep and why. I can arrange clips to make a short film that conveys meaning. I can add simple titles and credits. Select text and make simple changes including bold, italic and underlined.	Spring 1/2 Focus: Get Started with Coding 1 Learning Objectives: 1, 2, 3, Get Started with Coding eBook		Summer 1 Focus: Document creating and Editing Learning Objectives:	Summer 2 Focus: Digital Sound Learning Objectives: Everyone Can Create Music – Chapter 1
Year 3	Educational Visits/ Enrichment opportunities	National Initiatives	APP's to support topics	School Resources available	Resources to loan	Links to Websites

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Year 4	Autumn 1 Focus: Digital Imagery and animation Learning Objectives: Everyone Can Create Photo Ch 4	Autumn 2 Focus: Laptops Learning Objectives:	Spring 1/2 Focus: Getting Started with Code 2 Learning Objectives:		Summer 1 Focus: Creating Video Tutorials Learning Objectives: Everyone Can Create Video – Chapter 4	Summer 2 Focus: Digital Sound Learning Objectives: Everyone Can Create Music – Ch3
Year 4	Educational Visits/ Enrichment opportunities	National Initiatives	APP's to support topics	School Resources available	Resources to loan	Links to Websites

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Year 5	Autumn 1 Focus: Learning Objectives: Everyone Can Create Photo Ch 6	Autumn 2 Focus: Learning Objectives: Everyone Can Create Video Ch 3	Spring 1 Focus: Coding Learning Objectives:	Spring 2 Focus: Coding Learning Objectives:	Summer 1 Focus: Digital Sound Learning Objectives: Everyone Can Create Music Ch	Summer 2 Focus: Learning Objectives:
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Year 6	Autumn 1 Focus: Digital Imagery Learning Objectives:	Autumn 2 Focus: Creating Videos Learning Objectives: Everyone Can Create Video Ch 6/7	Spring 1 Focus: Learn to Code 1 Learning Objectives:	Spring 2 Focus: Learn to Code 1 Learning Objectives:	Summer 1 Focus: Coding Learning Objectives:	Summer 2 Focus: Learning Objectives:
Year 6	Educational Visits/ Enrichment opportunities	National Initiatives	APP's to support topics	School Resources available	Resources to loan	Links to Websites