

Computing Skills and Knowledge Coverage 2025-2026

Computing is taught explicitly and in-depth in Autumn 1, Spring 1 and Summer 1

Year 5/6
Autumn 1 – Creating media - Video production
<i>This unit of work builds upon the skills and knowledge children acquired during their unit on Creating Media in lower key stage 2. Learning moves on from using text and images, to communicate, to exploring the medium of video as a way of presenting ideas.</i> Lesson 1: What is video? Children will be introduced to video as a media format. They will see examples of videos featuring production and editing techniques that they will work towards using their own videos. Children will begin by explaining what the medium of video is before analysing and comparing examples of videos. Learning objectives: To explain what makes a video effective ✓ I can explain that video is a visual media format ✓ I can identify features of videos ✓ I can compare features in different videos Key vocabulary: Video, audio, camera, talking head, panning, close up
Lesson 2: Filming techniques Children will explore the capabilities of a digital device that can be used to record video. Once they are familiar with their device, children will experiment with different camera angles, considering how different camera angles can be used for different purposes. Learning objectives: To identify digital devices that can record video: ✓ I can identify and find features on a digital video recording device ✓ I can experiment with different camera angles ✓ I can make use of a microphone Key vocabulary: Video camera, microphone, lens, close up, mid-range, long shot, moving subject, side by side, high angle, low angle, normal angle



Lesson 3: Using a storyboard

Children will use a storyboard to explore a variety of filming techniques, some of which they will use in their own video project later in the unit. They will evaluate the effectiveness of these techniques before offering feedback on others' work.

Learning objectives:

To capture video using a range of techniques:

- ✓ I can suggest filming techniques for a given purpose
- ✓ I can capture video using a range of filming techniques
- ✓ I can review how effective my video is

Key vocabulary:

Static camera, zoom, pan, tilt, storyboard



Lesson 4: Planning a video

Learners will plan a video by creating a storyboard. Their storyboard will describe each scene, and will include a script, camera angles, and filming techniques. Learners will use their storyboards to film the first scene of their videos.

Learning objectives:

To create a storyboard:

- ✓ I can outline the scenes of my video
- ✓ I can decide which filming techniques I will use
- ✓ I can create and save video content

Key vocabulary:

Storyboard, filming, review



Lesson 5: Importing and editing video

Children will record the remaining scenes of their video, and then import their content to iMovie video editing software. Children will be introduced to the job role of a video producer and will take on the role of a video producer to edit their creations. They will then explore key editing techniques and decide whether sections of their video can be edited or need to be shot again.

Learning objectives:

To identify that video can be improved through reshooting and editing:

- ✓ I can store, retrieve, and export my recording to a computer
- ✓ I can explain how to improve a video by reshooting and editing
- ✓ I can select the correct tools to make edits to my video



Key vocabulary:

Import, split, trim, clip, edit, reshoot

Lesson 6: Video evaluation

Children will complete their video by removing unwanted content and reordering their clips using iMovie. They will then export their finished video and evaluate the effectiveness of their edits. Finally, they will consider how they could share their video with others.

Learning objectives:

To consider the impact of the choices made when making and sharing a video:

- ✓ I can make edits to my video and improve the final outcome
- ✓ I can recognise that my choices when making a video will impact on the quality of the final outcome
- ✓ I can evaluate my video and share my opinions

Key vocabulary:

Delete, trim, reorder, export, evaluate, share

**Lesson 7: Internet Safety Focus – You Won't Believe This! - What is clickbait and how can you avoid it?**

Building on the children's understanding of online video content through this unit, the children will learn that the internet is full of catchy headlines and unreliable and, sometimes, inappropriate images and videos, all of which are designed to make us curious and get our attention. This lesson will focus on the fact that we don't usually realise: What you click on isn't always what you get. Key learning will centre around teaching the children about the best ways to avoid clickbait online.

*Specific link to the use of YouTube – the main source of potential clickbait for our children.

Learning objectives:

- ✓ Define "the curiosity gap."
- ✓ Explain how clickbait uses the curiosity gap to get your attention.
- ✓ Use strategies for avoiding clickbait.

Key vocabulary:

Advertising, clickbait, headline, curiosity gap



Year 5/6**Spring 1 – Programming – Selection in quizzes**

This unit builds upon the skills and knowledge children acquired during their unit on 'Programming – Events and actions in programs' in lower key stage 2. In this unit, children develop their knowledge of selection by revisiting how conditions can be used in programs and then learning how the If... Then... Else structure can be used to select different outcomes depending on whether a condition is true or false. They represent this understanding in algorithms and then by constructing programs using the Scratch programming environment. They use their knowledge of writing programs and using selection to control outcomes to design a quiz in response to a given task and implement it as a program.

Lesson 1: Exploring conditions

In this lesson, children revisit previous learning on 'selection' and identify how 'conditions' are used to control the flow of actions in a program. They are introduced to the blocks for using conditions in programs using the Scratch programming environment. They modify the conditions in an existing program and identify the impact this has.

Learning objectives:

To explain how selection is used in computer programs:

- ✓ I can recall how conditions are used in selection
- ✓ I can identify conditions in a program
- ✓ I can modify a condition in a program

Key vocabulary:

Selection, condition, true, false, count-controlled loop

**Lesson 2: Selecting outcomes**

In this lesson, children will develop their understanding of selection by using the 'if... then... else...' structure in algorithms and programs. They will learn the need to use repetition in selection to ensure that conditions are repeatedly checked. They identify the two outcomes in given programs and how the condition informs which outcome will be selected. Children use this knowledge to write their own programs that use selection with two outcomes.

Learning objectives:

To relate that a conditional statement connects a condition to an outcome

- ✓ I can use selection in an infinite loop to check a condition
- ✓ I can identify the condition and outcomes in an 'if... then... else...' statement
- ✓ I can create a program with different outcomes using selection

Key vocabulary:

Selection, condition, true, false, outcomes, conditional statement (the linking together of a condition and outcomes), algorithm, program, debug



Lesson 3: Asking questions

In this lesson, children consider how the 'if... then... else...' structure can be used to identify two responses to a 'yes or no' question. They identify that the answer to the question is the 'condition', and use algorithms with a branching structure to represent the actions that will be carried out if the condition is true or false. They learn how questions can be asked in Scratch, and how the answer, supplied by the user, is used in the condition to control the outcomes. They use an algorithm to design a program that uses selection to direct the flow of the program based on the answer provided. They implement their algorithm as a program and test whether both outcomes can be achieved.

Learning objectives:

To explain how selection directs the flow of a program:

- ✓ I can explain that program flow can branch according to a condition
- ✓ I can design the flow of a program which contains 'if... then... else...'
- ✓ I can show that a condition can direct program flow in one of two ways

Key vocabulary:

Selection, condition, true, false, outcomes, question, answer, algorithm, program, debug

**Lesson 4: Planning a quiz**

In this lesson, learners will be provided with a task: to use selection to control the outcomes in an interactive quiz. They will outline the requirements of the task and use an algorithm to show how they will use selection in the quiz to control the outcomes based on the answer given. Learners will complete their designs by using storyboards to identify the questions that will be asked, and the outcomes for both correct and incorrect answers. To demonstrate their understanding of how they are using selection to control the flow of the program, learners will identify which outcomes will be selected based on given responses.

Learning objectives:

To design a program which uses selection:

- ✓ I can outline a given task
- ✓ I can use a design format to outline my project
- ✓ I can identify the outcome of user input in an algorithm

Key vocabulary:

Task, design, algorithm, input, program, selection, condition, outcomes

**Lesson 5: Testing a quiz**

In this lesson, children will use the Scratch programming environment to implement the first section of their algorithm as a program. They will run the first section of their program to test whether they have correctly used selection to control the outcomes, and debug their program if required. They will then continue implementing their algorithm as a program.

Once completed, they will consider the value of sharing their program with others so that they can receive feedback. Children will conclude the lesson by using another learner's quiz and providing feedback on it.

Learning objectives:

To create a program which uses selection:

- ✓ I can implement my algorithm to create the first section of my program
- ✓ I can test my program
- ✓ I can share my program with others

Key vocabulary:

Implement, design, algorithm, program, selection, condition, outcome, test, run

**Lesson 6: Evaluating a quiz**

In this lesson, children will return to their completed programs and identify ways in which the program can be improved. They will focus on issues where answers similar to those in the condition are given as inputs, and identify ways to avoid such problems. Children will also consider how the outcomes may change the program for subsequent users, and identify how they can make use of setup to provide all users with the same experience. They will implement their identified improvements by returning to the Scratch programming environment and adding to their programs. They conclude the unit by identifying how they met the requirements of the given task, and identifying the aspects of the program that worked well, those they improved, and areas that could improve further.

Learning objectives:

To evaluate my program:

- ✓ I can identify ways the program could be improved
- ✓ I can identify the setup code I need in my program
- ✓ I can extend my program further

Key vocabulary:

Design, algorithm, program, debug, test, setup, selection, condition, outcome

**Lesson 7: Internet Safety Focus – Digital Friendships - How do you keep online friendships safe?**

Building on this unit, children will learn that, through playing online games, they may develop friendships with other online users. But are all of these friendships the same? The lesson focuses on how can children start online friendships and also learn ways to stay safe. A key learning point of the lessons is that children understand both the benefits and the risks of online-only friendships.

Learning objectives:

- ✓ Compare and contrast different kinds of online-only friendships.

- ✓ Describe the benefits and risks of online-only friendships.
- ✓ Describe how to respond to an online-only friend if the friend asks something that makes them uncomfortable.

Key vocabulary:

Benefit, private information, risk, consent



Year 5/6**Summer 1 – Computing systems and networks - systems and searching**

This unit builds upon the children's prior learning, in lower key stage 2, of Computing Systems and Networks'. In this unit, children develop their understanding of computer systems and how information is transferred between systems and devices. Children consider small-scale systems as well as large-scale systems. They explain the input, output, and process aspects of a variety of different real-world systems. Crucially, children then discover how information is found on the World Wide Web, through learning how search engines work (including how they select and rank results) and what influences searching, and through comparing different search engines.

Lesson 1: Systems

This lesson introduces children to the concept of a system. Children will develop their understanding of components working together to make a whole. They will outline how digital systems might work and the physical and electronic connections that exist.

Learning objectives:

To explain that computers can be connected together to form systems

- ✓ I can explain that systems are built using a number of parts
- ✓ I can describe that a computer system features inputs, processes, and outputs
- ✓ I can explain that computer systems communicate with other devices

Key vocabulary:

System, connection, digital, input, process, output

Lesson 2: Computer systems and us

In this lesson, learners consider how larger computer systems work. They see how devices and processes are connected, and reflect on how computer systems can help them.

Learning objectives:

To recognise the role of computer systems in our lives:

- ✓ I can identify tasks that are managed by computer systems
- ✓ I can identify the human elements of a computer system
- ✓ I can explain the benefits of a given computer system

Key vocabulary:

System, connection, digital, input, process, output

Lesson 3: Searching the web

In this lesson, children are introduced to a range of search engines. They are given the opportunity to explain how to search, before they write and test instructions. Next, they learn that searches do not always return the results that someone is looking for, and refine their searches accordingly. Finally, children are introduced to the two most common methods of searching: using a search engine and using the address bar.

Learning objectives:

To experiment with search engines:

- ✓ I can make use of a web search to find specific information
- ✓ I can refine my web search
- ✓ I can compare results from different search engines

Key vocabulary:

Search, search engine, refine

**Lesson 4: Selecting search results**

In this lesson, children will gain an understanding of why search engines are necessary to help them find things on the World Wide Web. They conduct their own searches and break down, in detail, the steps needed to find things on the web. Children will then emulate web crawlers to create an index of their own classroom. Finally, they consider why some searches return more results than others.

Learning objectives:

To describe how search engines select results

- ✓ I can explain why we need tools to find things online
- ✓ I can recognise the role of web crawlers in creating an index
- ✓ I can relate a search term to the search engine's index

Key vocabulary:

Index, crawler, bot, search engine

**Lesson 5: How search results are ranked**

In this lesson, learners take part in an unplugged activity to find out about how a webpage's content can influence where it is ranked in search results. In groups, learners create paper-based webpages on a topic that they are familiar with. They then discover how their webpages would rank when searching for keywords relating to their content.

Learning objectives:

To explain how search results are ranked

- ✓ I can order a list by rank

- ✓ I can explain that a search engine follows rules to rank results
- ✓ I can give examples of criteria used by search engines to rank results

Key vocabulary:

Ordering, ranking, search engine, links, algorithm, search engine optimisation (SEO)

**Lesson 6: How are searches influenced**

In this lesson, children explore how someone performing a web search can influence the results that are returned, and how content creators can optimise their sites for searching. Children also explore some of the limitations of searching and discuss what cannot be searched.

Learning objectives:

To recognise why the order of results is important, and to who:

- ✓ I can describe some of the ways that search results can be influenced
- ✓ I can recognise some of the limitations of search engines
- ✓ I can explain how search engines make money

Key vocabulary:

Searching, search engine, web crawler, content creator, selection, ranking

**Lesson 7 – Internet Safety Focus – Don't Feed the Phish - How can you protect yourself from phishing?**

This lesson builds on the children's acquired knowledge of how the internet works. Children will learn that, unfortunately, scams are part of being online today, but many of us might not be aware of them. Key learning focuses on how we can avoid being tricked into clicking malicious links or giving out private information. The lesson centres around avoiding online identity theft and phishing schemes.

Learning objectives:

- ✓ Compare and contrast identity theft with other kinds of theft
- ✓ Describe different ways that identity theft can occur online
- ✓ Use message clues to identify examples of phishing

Key vocabulary:

Private information, identity theft, phishing, internet scam, shortened URL

