Knowing More. Remembering More. Applying More!
Assessment in Foundation Subjects – Computing Year 3

Teachers to assess how well children have learned the required knowledge at the end of each term.
Working Towards (WTS) Expected (EXS) Greater Depth (GDS)

	Autumn Term – Networks – connecting computers / Programming A Sequence
Substantive Knowledge (concepts)	**Networks:** To understand that computers need input and output devices. To identify how devices in a network are connected to one another and the benefits of computer networks. **Programming A:** To identify that a program includes sequences of commands. To explain that the order of commands can affect a program's output. To identify that different sequences can achieve different outputs, or the same output.
Disciplinary knowledge (application of skills)	**Networks:** I can identify input and output devices and explain the processes they do. I can identify network devices around me and how they connect to one another. I can explain how switches, servers and wireless access points can be used in a network to share information. **Programming A:** I can build a sequence of commands. I can combine and order commands in a program. I can create a sequence of commands to produce a given outcome.
Key vocabulary	**Networks:** Network, data, server, wireless access points (WAPs), network switch, router, input, process, output, Wi-Fi, Bluetooth. **Programming A:** Debug, sequence, decompose, selection, repetition, variables, input, output, algorithms, programs, code, block-based coding, Scratch, sprite, staging area, code block, run, event block, control blocks

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Assessment in Foundation Subjects – Computing Year 4

Teachers to assess how well children have learned the required knowledge at the end of each term.
Working Towards (WTS) Expected (EXS) Greater Depth (GDS)

	Autumn Term – Networks – the Internet / Creating Media - audio editing
Substantive Knowledge (concepts)	**Networks:** To describe how networks connect and communicate with each other and that together, the global interconnection of networks make up the Internet. To recognise that the World Wide Web (WWW) is a collection of websites and web pages, and that the Internet enables us to view these. To understand that WWW content can be created by anyone and shared with everyone. **Creating Media:** To recognise that sound can be recorded digitally and stored as a file. To recognise audio can be edited and altered. To consider and understand the results of editing choices made.
Disciplinary knowledge (application of skills)	**Networks:** I can describe what the Internet is, and how devices physically connect. I can explain what the World Wide Web is, and the difference between it and the Internet. I can explain the different types of content that can be created for the WWW and evaluate its reliability, the usefulness of content created, and the consequences of unreliable content. **Creating Media:** I can use Audacity to record sound digitally, using a device with a microphone and save it as an audio file, and locate the file again. I can use Audacity to play back, select, edit and alter an audio file, and understand what layering sound means. I can explain how my audio file is different and explain why I have changed it in that way.
Key vocabulary	**Networks:** Network, data, World Wide Web, Internet, web page, website, content, media, copywrite. **Creating Media:** Audio file, digitally, microphone, select, input, output, volume, Audacity, podcast

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Assessment in Foundation Subjects – Computing Year 5

Teachers to assess how well children have learned the required knowledge at the end of each term.
Working Towards (WTS) Expected (EXS) Greater Depth (GDS)

	Autumn Term – Programming A – selection / Creating Media – vector drawing
Substantive Knowledge (concepts)	**Programming A:** To understand sequence, selection and repetition in programming. To understand that a conditional statement, using 'If…then…' statements, can either be true or false. To understand that a loop can be used to check whether a condition has been met or not, and that it can stop when the condition has been met. **Creating Media:** To recognise what a vector drawing is, and that different tools can be used to modify them. To recognise that objects are layered and can be grouped or sent backwards / forwards. To recognise that vector images can be modified in a variety of ways, without impacting on quality.
Disciplinary knowledge (application of skills)	**Programming A:** I can define sequence as being the order of instructions in a program, selection as being the outcome of a conditional statement, and repetition as a count-controlled loop in a program, which stops when a condition is met. To use a condition in an 'if... then…' statement to produce a given outcome and show that a condition can switch program flow in one of two ways. To experiment with a 'repeat until' loop, changing counts and events within the loop. **Creating Media:** I can describe a vector drawing and create it as a 2D drawing on a screen. I can group and layer objects on a screen and evaluate the impact of my choices. I can use a variety of modifying tools to change a vector drawing, by selecting, rotating, dragging, repositioning, adding, recolouring, resizing and grouping objects.
Key vocabulary	**Programming A:** Crumble controller, Scratch, algorithm, sequence, selection (if...then…statements), repetition, loop, count-controlled or infinite loop, conditional statement, LED, sparkle, debug. **Creating Media:** Vector drawing, layer, group, modify, 2D object.

Knowing More. Remembering More. Applying More!
Assessment in Foundation Subjects – Computing Year 6

Teachers to assess how well children have learned the required knowledge at the end of each term.
Working Towards (WTS) Expected (EXS) Greater Depth (GDS)

	Autumn Term – Networks - communication / Data Handling - spreadsheets
Substantive Knowledge (concepts)	**Networks:** To understand that there are a number of search engines and explain how search results are found, ordered and 'ranked'. To understand why the order of results is important, and to whom, and understand some of the limitations of search engines. To define 'communication' and discuss the opportunities that technology offers for communication. **Data-Handling:** To explain what data is, and that it needs a context. To understand the different types of software that deal with and organise data. To understand how and why data should be organised and presented, evaluating data presentation and results in comparison to the question asked.
Disciplinary knowledge (application of skills)	**Networks:** I can compare different search engines and explain why search results might be different, when searching for the same thing. I can evaluate the results of search terms and identify that results from search engines can include adverts, and that the adverts can be targeted. I can identify different ways to communicate without technology and evaluate different methods of online communication effectively. **Data-Handling:** I can give examples of data types and contexts in which they may be used. I can identify and use data handling software and input, present and evaluate data. I can apply formulas to data and present data using tools within a software program, explaining how my data presentation represents the answer to a specific question.
Key vocabulary	**Networks:** Address bar, search box, World Wide Web, search engine, web crawler, page rank, ranking, communication, search terms. **Data-Handling:** Data, spreadsheet, cell, formula, select, duplicate, input, output, column, row, format.