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Computing Year B Learning Overview

Nursery Rather than a scheme with set lessons, the early years resources are designed to integrate into the day-to-day routine and continuous provision, with opportunities for using Computing as part of the Early Years curriculum to support children in working towards early learning goals.					
Nursery	**Computing Systems and Networks** *(Continuous Learning)*	**Programming** *(Continuous Learning)*	**Data and Information** *(Continuous Learning)*	**Creating Media**	**Safety & Security** *(Continuous Learning)*
Vocab	Computer, click, drag, button, log in, log out, app, double click, keyboard, laptop, mouse, iPad, tablet, telephone, mobile phone, CD, DVD player, remote control.	Control, move, forward, backward, turn, pull, push, wind, lift, press, twist.	sort, sequence, order	Type, paint, record, photograph, speaker, sound, headphones, camera, television, video, tools, draw, select, delete, choose, change.	Safety, e-safety, online, internet, website, rules, trust, feelings, happy, worried, program, game, app.
Key Skills	**Technology Around Us** ▪ Talk about different kinds of information such as pictures and words. ▪ Control and move objects on a screen. ▪ Use and operate simple technological devices in everyday life. ▪ Talk about and use 'make believe' technology in play.	**Programming** ▪ Use a Bee-Bot and make it move. ▪ Choose which buttons to press to give instructions to a Beebot. ▪ Choose buttons to control other programmable toys. ▪ Choose instructions to control applications to play games.	**Sorting** ▪ Sort objects into groups ▪ Arrange objects in height order ▪ Put objects in the correct order (sequence)	**Pictures and Sounds** ▪ Use technology to draw pictures on a computer/ tablet device. ▪ Use technology to record sounds and listen back to them. ▪ Use technology to take photographs or videos to record images and events.	▪ Learn safety rules for technological devices, programs and applications. ▪ Stay on the program that an adult has chosen. ▪ Be kind to my friends when I use the computer. ▪ Only an adult can select a website / program / App to use that is age appropriate. ▪ Tell an adult if I get a worried feeling when I am online.
Resources	▪ Technological toys, e.g. iron, microwave, telephone, computer.	▪ Beebots ▪ Floor maps ▪ Programmable toys ▪ Tablet apps and games	▪ Toys, figures, Lego, pencils, buckets ▪ Sorting Game	▪ 2Paint a Picture ▪ Simple City ▪ Doodle Buddy App	▪ Website browsers ▪ Online games ▪ Tablet apps and games

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Reception

Rather than a scheme with set lessons, the early years resources are designed to integrate into the day-to-day routine and continuous provision, with opportunities for using Computing as part of the Early Years curriculum to support children in working towards early learning goals.

Reception	Computing Systems and Networks *(Continuous Learning)*	Programming *(Continuous Learning)*	Data and Information *(Continuous Learning)*	Creating Media *(Continuous Learning)*	Safety & Security *(Continuous Learning)*
Vocab	Computer, click, drag, drop, button, log in, log out, app, double click, keyboard, laptop, mouse, iPad, tablet, phone, CD, DVD player, remote control, eBook	Control, move, forward, backward, turn, pull, push, wind, lift, press, twist, algorithm, sequence, repeat, blocks, debug	sort, sequence, order, pattern, repeat	Type, paint, record, photograph, speaker, sound, headphones, camera, television, video, tools, draw, select, delete, choose, change.	Safety, e-safety, online, internet, website, rules, trust, feelings, happy, worried, program, game, app.
Key Skills	**Technology Around Us** ▪ Talk about different kinds of information such as pictures and words. ▪ Control and move objects on a screen. ▪ Use and operate simple technological devices in everyday life. ▪ Talk about and use 'make believe' technology in play.	**Programming** ▪ Use a Bee-Bot and make it move. ▪ Choose which buttons to press to give instructions to a Beebot. ▪ Choose buttons to control other programmable toys. ▪ Choose instructions to control applications to play games. ▪ Follow algorithms ▪ Drag and drop objects using a mouse or touch screen ▪ Create an algorithm ▪ Debug an algorithm	**Sorting** ▪ Sort objects into groups ▪ Arrange objects in height order ▪ Put objects in the correct order (sequence) **Patterns** ▪ Make simple patterns ▪ Spot repeating patterns ▪ Identify the next object in a pattern	**Pictures and Sounds** ▪ Use technology to draw pictures on a computer/ tablet device. ▪ Use technology to record sounds and listen back to them. ▪ Use technology to take photographs or videos to record images and events. ▪ Change and 'tinker' with a picture or sound effect	▪ Learn safety rules for technological devices, programs and applications. ▪ Stay on the program that an adult has chosen. ▪ Be kind to my friends when I use the computer. ▪ Only an adult can select a website / program / App to use that is age appropriate. ▪ Tell an adult if I get a worried feeling when I am online. ▪ Know what to do if they feel uncomfortable when they see something on the internet.
Resources	▪ Technological toys, e.g. iron, microwave, telephone, computer. eBooks	▪ Beebots ▪ Floor maps ▪ Programmable toys ▪ Tablet apps and games ▪ Algorithm cards	▪ Toys, figures, Lego, pencils, buckets ▪ Sorting Game	▪ 2Paint a Picture ▪ Simple City ▪ Doodle Buddy App ▪ Artwork by Mondrion ▪ Song Maker app	▪ Website browsers ▪ Online games ▪ Tablet apps and games ▪ Emotion cards

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KS1	**Computing Systems and Networks: Information Technology Around Us** Identifying IT and how its responsible use improves our world in school and beyond.	
CYCLE ~ B **red italic text = key learning points*	**Prior Vocabulary:** Computer, click, drag, button, log in, log out, app, double click, keyboard, laptop, mouse, iPad, tablet, telephone, mobile phone, CD, DVD player, remote control. **Key vocabulary:** Device, Information Technology (IT), PC, device, scanner, barcode, printer, smart, speaker, till, bank card, chip and PIN, card reader, traffic light, crossing button, crossing signal, Connected World, online safety	
	Enquiry questions (sequenced): ▪ What is IT? ▪ What IT do we use in school? ▪ What IT do we use in the world around us? ▪ What are the benefits of IT? (How does IT help us positively? ▪ How can we use IT safely?	
	By the end of this unit, pupils will know (substantive knowledge) ▪ Identify examples of computers ▪ Describe some uses of computers ▪ Identify that a computer is part of IT ▪ Identify the uses of information technology in the school and sort IT by what it is used for ▪ Identify information technology beyond school and find examples ▪ Explain how information technology helps us ▪ Know rules for using technology safely and give examples ▪ *Recognise common uses of information technology beyond school*	**By the end of this unit, pupils will be able to (procedural and disciplinary knowledge)** ▪ Demonstrate how IT devices can work together ▪ List different uses of information technology ▪ Talk about rules for using IT and how they help to keep them safe ▪ Use IT for different types of activities and explain how they used them differently ▪ *Use technology purposefully to create, organise, store, manipulate and retrieve digital content* ▪ *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*

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KS1	**Creating Media: Digital Photography** *(Linked to other subject)* Capturing and changing digital photographs for different purposes.	
CYCLE ~ B *red italic text = key learning points	**Prior Vocabulary:** paint, record, photograph, camera, tools, draw, select, delete, choose, change. **Key vocabulary:** Composition, framing, lighting, blur, online, photo editing, software, apply, filters, effect, save, download, image, landscape, portrait,	
	Enquiry questions (sequenced): ▪ How do you take a digital photograph? ▪ Should the photograph be portrait or landscape? ▪ What makes a good photograph? ▪ How can you use lighting to improve a photograph? ▪ What effects can you use to improve a photograph? ▪ Is it a real photograph?	
	By the end of this unit, pupils will know (substantive knowledge) ▪ Recognise what device can be used to take photographs ▪ escribe what makes a good photograph and identify what is wrong with a photograph ▪ Recognise that photos can be changed ▪ Identify which photos are real and which have been changed ▪ *Recognise common uses of information technology beyond school*	**By the end of this unit, pupils will be able to (procedural and disciplinary knowledge)** ▪ Use a digital device to take a photograph and explain what they did to capture a digital photo ▪ Make choices when taking a photograph and explain the process of taking a good photograph ▪ Take photos in both landscape and portrait format and explain why a photo looks better in portrait or landscape format ▪ Improve a photograph by retaking it and discuss how to take a good photograph ▪ Decide how photographs can be improved and experiment with different light sources ▪ Use tools to change an image to achieve a desired effect and explain their choices ▪ *Use technology purposefully to create, organise, store, manipulate and retrieve digital content*

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KS1	**Data and Information: Pictograms** Collecting data in tally charts and using attributes to organise and present data on a computer.	
CYCLE ~ B *red italic text = key learning points	**Prior Vocabulary:** Safety, online, internet, website, rules, trust, feelings, happy, worried, program, game, app. **Key vocabulary:** Search, data, information, operation, application, present, property, attribute, pictogram, task, input, image, collect, 'data set'	
	Enquiry questions (sequenced): ▪ How can you present data in different ways? ▪ How many different ways can you organise data? ▪ What is an attribute? ▪ How many different ways can you compare people? ▪ Why should information not be shared?	
	By the end of this unit, pupils will know (substantive knowledge) ▪ Recognise that we can count and compare objects using tally charts ▪ Recognise that objects can be represented as pictures ▪ Explain what the pictogram shows ▪ Recognise that people can be described by attributes ▪ Explain that we can present information using a computer ▪ Give simple examples of why information should not be shared ▪ Identify some simple examples of personal information (e.g. name, address, birthday, age, location) ▪ Describe the people that can be trusted and explain why you can trust them	**By the end of this unit, pupils will be able to (procedural and disciplinary knowledge)** ▪ Record data in a tally chart and compare totals in a tally chart ▪ Use a computer to view data in a different format ▪ Use pictograms to answer simple questions about objects ▪ Create a pictogram and organise data in a tally chart ▪ Select objects by attribute and make comparisons ▪ Choose a suitable attribute to compare people ▪ Create a pictogram and draw conclusions from it ▪ Use a computer program to present information in different ways ▪ *Use technology purposefully to create, organise, store, manipulate and retrieve digital content* ▪ *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*

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KS1	**Programming: Robot Algorithms** Creating and debugging programs, and using logical reasoning to make predictions.	
CYCLE ~ B *red italic text = key learning points	**Prior Vocabulary:** Control, move, forward, backward, turn, pull, push, wind, lift, press, twist, algorithm, sequence, repeat, blocks, debug **Key vocabulary:** Robot, program, algorithm, clear, precise, order, instruction, digital device, code, predict, design, project, task, run the code, evaluate, change, outcome, same, different, mat, route,	
	Enquiry questions (sequenced): ▪ Can you plan a series of clear instructions? ▪ Can the same instructions have different outcomes? ▪ Can you predict what might happen by following instructions? ▪ Can you plan a route using an algorithm? ▪ Can you check and debug a program you have written?	
	By the end of this unit, pupils will know (substantive knowledge) ▪ Describe a series of instructions as a sequence ▪ Explain what happens when we change the order of instructions ▪ Explain that programming projects can have code and artwork ▪ Identify different routes around my mat ▪ *Understand what algorithms are, how they are implemented as programs on digital devices, and that programs execute by following precise and unambiguous instructions* ▪ *Use logical reasoning to predict the behaviour of simple programs*	**By the end of this unit, pupils will be able to (procedural and disciplinary knowledge)** ▪ Choose a series of words that can be acted out as a sequence and give clear instructions ▪ Use instructions to create algorithms to program a sequence on a floor robot ▪ Show the difference in outcomes between two sequences that consist of the same instructions ▪ Use logical reasoning to predict the outcome of a program ▪ Compare my prediction to the program outcome ▪ Test their mat design to make sure that it is usable ▪ Design and use an algorithm to create a program ▪ Create and debug a program that you have written ▪ *Create and debug simple programs*

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LKS2	**Computing Systems and Networks: The Internet / Safety & Security** Recognising the internet as a network of networks including the WWW, and why we should evaluate online content. Understand risks when using technology, and how to protect individuals and systems	
CYCLE ~ B **red italic text = key learning points*	**Prior Vocabulary:** Device, information technology (IT), computer, PC, laptop, tablet, device, scanner, barcode, printer, smart, speaker, till, bank card, chip and PIN, card reader, traffic light, crossing button, crossing signal, Connected World, online safety **Key vocabulary:** Network, secure, World Wide Web, explore, content, access, add, create, evaluate, honest, accurate, reliable, false, consequence, sharing	
	Enquiry questions (sequenced): ▪ What is the internet made of? ▪ What is a website? ▪ Who owns the web? ▪ Can I believe what I read?	
	By the end of this unit, pupils will know (substantive knowledge) ▪ Describe how networks physically connect to other networks ▪ Discuss why a network needs protecting ▪ Recognise how networked devices make up the internet ▪ Recognise that the World Wide Web (WWW)contains websites and web pages ▪ Explain the types of media that can be shared on the WWW ▪ Describe where websites are stored when uploaded to the WWW ▪ Describe how content can be added and accessed on the WWW ▪ Recognise how the content of the WWW is created by people ▪ Explain that there are rules to protect content ▪ Evaluate the consequences of unreliable content ▪ *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*	**By the end of this unit, pupils will be able to (procedural and disciplinary knowledge)** ▪ *Use sequence, selection, and repetition in programs; work with variables and various forms of input and output* ▪ *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* ▪ *Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact*

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LKS2	**Creating Media: Audio Editing** *(Linked to other subject)* Capturing and editing audio to produce a podcast, ensuring that copyright is considered.	
CYCLE ~ B *red italic text = key learning points	**Prior Vocabulary:** desktop, publishing, online safety, words, pictures, edit, device, digital, identify, create, edit, add, open, save, evaluate **Key vocabulary:** record, sound, audio, input, output, microphone, speaker, headphones, ownership, copyright, duplicate, podcast, combine, multiple, track, feedback	
	Enquiry questions (sequenced): ▪ What is a copyright? ▪ What are the features of a podcast? ▪ Why is it important to save recordings as they are made? ▪ Why are recordings changed? ▪ What makes good podcast?	
	By the end of this unit, pupils will know (substantive knowledge) ▪ Identify that sound can be digitally recorded ▪ Explain that a digital recording is stored as a file ▪ Explain that audio can be changed through editing ▪ Evaluate editing choices made and suggest improvements	**By the end of this unit, pupils will be able to (procedural and disciplinary knowledge)** ▪ Use a digital device to record sound ▪ Save a digital recording as a file ▪ Use editing tools to arrange sections of audio ▪ *Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content* ▪ *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*

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LKS2	**Programming: Repetition in Shapes** Using a text-based programming language to explore count-controlled loops when drawing shapes.	
CYCLE ~ B *red italic text = key learning points	**Prior Vocabulary:** program, algorithm, clear, precise, order, instruction, digital device, code, create, run the code, evaluate, change, outcome, same, different **Key vocabulary:** repetition, loop, plan, modify, test, command, shape, pattern, language, turtle, screen, letters, repeat	
	Enquiry questions (sequenced): ▪ What is a program code? ▪ What is an algorithm? ▪ How do you debug a code? ▪ Can you predict what the code will do?	
	By the end of this unit, pupils will know (substantive knowledge) ▪ Identify that accuracy in programming is important ▪ Explain what 'repeat' means ▪ Predict the outcome of a program containing a count-controlled loop ▪ *Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs*	**By the end of this unit, pupils will be able to (procedural and disciplinary knowledge)** ▪ Program a computer by typing commands ▪ Create a program in a text-based language ▪ Use a count-controlled loop to produce a given outcome ▪ Modify a count-controlled loop to produce a given outcome ▪ Decompose a program into parts ▪ Create a program that uses count-controlled loops to produce a given outcome ▪ Develop my program by debugging it ▪ *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 output* ▪ *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*

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LKS2	**Data and Information: Data Logging** Recognising how and why data is collected over time, before using data loggers to carry out an investigation.	
CYCLE ~ B *red italic text = key learning points	**Prior Vocabulary:** Label, Match, Group, Count, Describe, Object, Compare, Question, Answer, Search, Data, Information, Operation, Application, Present, Property, Attribute, Pictogram, Computer, Task, Input, Image, Collect, 'data set' **Key vocabulary:** Data, collect, senses, experience, environment, sensors, monitor, data points, data sets, logging, intervals, review, analyse	
	Enquiry questions (sequenced): ▪ Can all questions be answered? ▪ What kinds of data can be collected using a sensor? ▪ What can a data logger be used for? ▪ What questions can be answered using the data collected?	
	By the end of this unit, pupils will know (substantive knowledge) ▪ Explain that data gathered over time can be used to answer ▪ Explain that a data logger collects 'data points' from sensors over time questions ▪ Identify the data needed to answer questions ▪ Explain the benefits of using a data logger	**By the end of this unit, pupils will be able to (procedural and disciplinary knowledge)** ▪ Use a digital device to collect data automatically ▪ Use data collected over a long duration to find information ▪ Use a computer program to sort data ▪ Use a data logger to collect data ▪ Use collected data to answer questions ▪ *Use sequence, selection, and repetition in programs; work with variables and various forms of input and output* ▪ *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*

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UKS2	**Computing Systems and Networks: Internet Communication & Collaboration / Safety and Security** Recognising how the WWW can be used to communicate and be searched to find information. Understand risks when using technology, and how to protect individuals and systems
CYCLE ~ B *red italic text = key learning points	**Prior Vocabulary:** Network, internet, secure, World Wide Web, website, explore, content, access, add, create, evaluate, reliable, false, consequence, connect, sharing, project, transfer, share **Key vocabulary:** Data, transfer, address, makeup, structure, data packets, online communication, collaboration, projects, communicate responsibly, consider, sharing
	Enquiry questions (sequenced): ▪ What is an IP address? What is a Domain Name Server (DNS)? ▪ What information can you send across the internet in data packets? ▪ How can we communicate using the internet? And for what purpose? ▪ How can we communicate responsibly?

By the end of this unit, pupils will know (substantive knowledge)

- Explain the importance of internet addresses
- Recognise how data is transferred across the internet
- Identify and explain the main parts of a data packet
- Explain how sharing information online can help people to work together
- Explain that the internet allows different media to be shared
- Recognise that working together on the internet can be public or private
- Recognise how we communicate using technology to suit particular purposes

- *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*

By the end of this unit, pupils will be able to (procedural and disciplinary knowledge)

- Describe how computers use addresses to access websites
- Send information over the internet in different ways
- Evaluate different ways of working together online
- Evaluate different methods of online communication
- Decide when I should and should not share information online

- *Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts*
- *Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content*
- *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*
- *Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact*

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UKS2	**Creating Media: Webpage Creation** *(Linked to other subject)* Designing and creating webpages, giving consideration to copyright, aesthetics, and navigation.
CYCLE ~ B *red italic text = key learning points	**Prior Vocabulary:** Digital, image, change, edit, save, resave, create, evaluate, effectiveness, choice, explore, group, duplicate, software, effective, manipulate, design **Key vocabulary:** Website, purpose, web page, evaluate, copyright, fair use, media, aesthetics, navigation, paths, layout, links
	Enquiry questions (sequenced): ▪ What makes a good website? ▪ How would you lay out your web page? ▪ Copyright or copyWRONG?
	By the end of this unit, pupils will know (substantive knowledge) ▪ Discuss the different types of media used on websites ▪ Know that websites are written in HTML ▪ Recognise the common features of a web page ▪ Consider the ownership and use of images (copyright) ▪ Describe what is meant by the term 'fair use' ▪ Recognise the need to preview pages ▪ Explain what a navigation path is ▪ Recognise the implications of linking to content owned by other people
	By the end of this unit, pupils will be able to (procedural and disciplinary knowledge) ▪ Review an existing website and consider its structure ▪ Plan the features of a web page to suit the purpose ▪ Find copyright-free images ▪ Add content to their own web page ▪ Evaluate what my web page looks like on different devices and suggest/make edits. ▪ Make multiple web pages and link them using hyperlinks ▪ Evaluate the user experience of a website ▪ *Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content* ▪ *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*

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UKS2	**Programming: Variables in Games** Exploring variables when designing and coding a game.	
CYCLE ~ B *red italic text = key learning points	**Prior Vocabulary:** Scratch, program, repetition, loop, create, plan, modify, test, command, shape, pattern, language, turtle, screen, letters, repeat, model, demonstrate **Key vocabulary:** Variables, games, values, simulation, scoreboard, modify, experiment, project, design, improve, code, share	
	Enquiry questions (sequenced): ▪ What is a variable? ▪ How do different variables change the program? ▪ Why is it important to name variables? ▪ In what ways can you improve the game program?	
	By the end of this unit, pupils will know (substantive knowledge) ▪ Define, identify and explain a 'variable' as something that is changeable ▪ Explain why a variable is used in a program ▪ Recognise that the value of a variable can be changed ▪ ▪ *Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts* ▪ *Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs*	**By the end of this unit, pupils will be able to (procedural and disciplinary knowledge)** ▪ Choose how to improve a game by using variables ▪ Design a project that builds on a given example ▪ Create algorithms for their project ▪ Create artwork for their project ▪ Test the code that they have written ▪ Identify ways that their game could be improved ▪ *Use sequence, selection, and repetition in programs; work with variables and various forms of input and output* ▪ *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*

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UKS2	**Data and Information: Introduction to Spreadsheets** Answering questions by using spreadsheets to organise and calculate data.	
CYCLE ~ B *red italic text = key learning points	**Prior Vocabulary:** Data, collect, input, data points, data sets, database, logging, intervals, review, analyse, questions, answers, organise, graphs, charts, present **Key vocabulary:** Spreadsheet, column, row, formatting, calculation, formula, apply, cell, duplicate, event, graphs, charts, results, comparison, modify, present	
	Enquiry questions (sequenced): ▪ What is a spreadsheet? ▪ Can you find out what the formula is? ▪ How do you use a spreadsheet to calculate the cost?	
	By the end of this unit, pupils will know (substantive knowledge) ▪ Identify, ask & answer questions which can be answered using data ▪ Explain that objects can be described using data ▪ Explain that formula can be used to produce calculated data ▪ Explain why data should be organised ▪ Suggest when to use a table or graph	**By the end of this unit, pupils will be able to (procedural and disciplinary knowledge)** ▪ Apply an appropriate number format to a cell ▪ Build a data set in a spreadsheet application ▪ Construct a formula in a spreadsheet ▪ Identify that changing inputs changes outputs ▪ Create and apply formulas to data, including duplicating ▪ Create and apply a spreadsheet to plan an event ▪ Choose suitable ways to present data, produce a graph and answer questions ▪ *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*