

# Computing

Progression of skills

EYFS > Y6



# Progression of skills – Y1

Term	Computer science	Information technology	Digital literacy
Autumn	<p>I can use movement commands to create coherent sequences of code</p> <p>I can use rotation to create coherent sequences of code</p>	<p>I am familiar with different technological devices in my classroom and can use a keyboard/touchscreen to complete simple tasks</p>	<p>I recognise that there may be people online that could make someone feel sad or embarrassed</p> <p>I can give examples of when and how I might speak to a trusted adult if I ever felt sad, worried, uncomfortable or frightened</p> <p>I can use a range of tools to paint online and conclude whether paintings are better with or without the use of digital devices</p>
Spring	<p>I can use the 'pick up' function to create coherent sequences of code</p> <p>I can debug simple sequences of code</p>		<p>I can explain why it is important to be considerate and kind to people online and to respect their choices</p> <p>I can explain why things one person finds funny or sad online may not always be seen in the same way by others and give examples of when I should ask for permission before I do something online.</p> <p>I can describe how to behave online in ways that do not upset others and can give examples.</p>
Summer	<p>I can begin to use loops in efficient sequences of code</p> <p>I can begin to use functions in efficient sequences of code</p>	<p>I can sort, label and group objects based on different properties</p> <p>I can answer questions about data using groups</p>	<p>I know that information put online can be copied and can describe what information I should not put online without asking a trusted adult first</p> <p>I can type on a keyboard and begin to make changes to text using a variety of tools</p>

# Progression of skills – Y2

Term	Computer science	Information technology	Digital literacy
Autumn	<p>I can use a variety of movement commands to create efficient sequences of code</p> <p>I can debug basic sequences of code</p>	<p>I understand how technology is used for good in my life as well as public places like shops, hospitals and libraries</p> <p>I understand how to use these forms of technology safely and responsibly</p>	<p>I can use keywords in search engines and know how to navigate a simple webpage</p> <p>I can explain why some information that I find online may not be real or true</p> <p>I know that passwords can be used to protect information, accounts or devices and understand how to keep this personal information safe</p>
Spring	<p>I can utilise looped movement in an efficient sequence of code</p> <p>I can include functions in efficient sequences of code</p>		<p>I can create music with both percussion instruments and digital tools and compare both</p> <p>I can create themed music digitally and share my creations with others</p> <p>I can explain simple guidance for using technology in different settings</p>
Summer	<p>I can utilise basic loops throughout efficient sequences of code</p> <p>I can debug sequences of code of ranging complexity</p>	<p>I understand what data is and some examples of how people can collect it</p> <p>I can present a simple set of data in the form of a pictogram and answer questions based on it</p>	<p>I know that different devices can capture photographs and have experienced capturing, editing and improving photos.</p> <p>I understand that digital photographs can be edited or created and that some may not be real.</p> <p>I recognise that content on the internet may belong to other people and that permission is sometimes needed to use it</p>

# Progression of skills – Y3

Term	Computer science	Information technology	Digital literacy
Autumn	<p>I can use loops in coherent sequences of code</p> <p>I can use functions in coherent sequences of code</p>	<p>I can identify digital devices and consider the processes they are capable of</p> <p>I know that devices receive inputs and generate outcomes</p> <p>I understand network infrastructure devices like routers and switches</p>	<p>I can explain what it means to “know someone” online and why that might be different to knowing them offline</p> <p>I understand why it is important to be careful about who you trust online as well as the information and content that you trust them with</p> <p>I can explain why giving or gaining permission before sharing things online is important</p> <p>I can explain how to search for information about others online</p>
Spring	<p>I can spot patterns in code and use loops in order to create efficient sequences of code</p> <p>I can debug faulty code</p>		<p>I can explain the meaning of identity and explain why people might change their identity online depending on the platform</p> <p>I can create a story-based animation using stop-frame animation</p>
Summer	<p>I can create more complex functions in order to create coherent sequences of code</p> <p>I can use loops in trickier sequences of code</p>	<p>I can create physical and digital branching databases using yes/no questions</p>	<p>I can give examples of what bullying behaviour might look like online and how someone could get support</p> <p>I can publish my writing using Keynote or Pages and consider choices in layout, templates and placeholders</p>

# Progression of skills – Y4

Term	Computer science	Information technology	Digital literacy
Autumn	<p>I can spot patterns in code and use loops to most efficiently create coherent sequences</p> <p>I can create more complex functions in order to create the most efficient sequences of code</p>	<p>I understand that the internet is one huge network of networks and that the world wide web is part of that</p> <p>I can evaluate online content, considering how honest, accurate or reliable it is</p>	<p>I can search for information using a variety of platforms and analyse this for probably accuracy/reliability</p> <p>I can explain some of the digital methods used to encourage people to buy things online</p> <p>I know that lots of people sharing the same opinion or belief online does not make it true</p> <p>I know that technology can be designed to impersonate a living thing and understand the benefits and risks of this</p>
Spring	<p>I can use loops in trickier sequences of code</p> <p>I can debug horribly faulty code</p>		<p>I can identify times or situations where someone might need to limit the amount of technology they use</p> <p>I understand the ways in which photos can be changed/edited and the impact on effectiveness that this can have</p> <p>I can plan, record and edit a podcast</p>
Summer	<p>I can use nested loops within coherent sequences of code</p> <p>I can use 'If' statements in coherent sequences of code</p>	<p>I understand that computers use sensors to capture data</p> <p>I can collect data to be stored digitally</p> <p>I can analyse data collected over long periods of time</p>	<p>I understand that I cannot use and reshare some content without permission from the owner</p> <p>I know that some online services may seek to store information about me but understand the digital age of consent and how this impacts me</p>

# Progression of skills – Y5

Term	Computer science	Information technology	Digital literacy
Autumn	<p>I can correct 'horrible bugs' in code in order to create a coherent sequence</p> <p>I can utilise functions and loops in a sequence</p>	<p>I understand how my input can influence the output of a computer system</p> <p>I understand how search results are ranked and how to most efficiently search a variety of web browsers</p>	<p>I can describe ways in which people can be bullied using a range of media and explain why everybody should think carefully about the content they share online</p> <p>I understand that technology use can be a distraction from other things in both a positive and negative way</p>
Spring	<p>I can utilise nested loops in a sequence</p> <p>I understand 'If' statements and can use them in coherent sequences</p>	<p>I can use a digital database to order and answer questions about data</p> <p>I can create graphs and charts using data from a digital database</p>	<p>I can plan, capture, edit and manipulate video in creating short films including the use of green screen</p>
Summer	<p>I can use repeated loops within a sequence</p> <p>I can track changes and use variables in coherent sequences</p>		<p>I can describe strategies to keep personal information safe online but understand that internet use is never fully private and is monitored</p> <p>I can use different digital drawing tools to help me create vector graphics</p>

# Progression of skills – Y6

Term	Computer science	Information technology	Digital literacy
Autumn	<p>I can create custom solutions using functions and loops to solve problems</p> <p>I can utilise the 'repeat until' tool in creating efficient sequences</p>	<p>I understand what a data packet is and can work collaboratively online with others</p>	<p>I understand why representation is important online</p> <p>I know where to get help both off/online if I or somebody I know felt sad, worried, uncomfortable or frightened.</p> <p>I can demonstrate the use of search tools to find content which can be reused and reference these</p>
Spring	<p>I can track variables like the score in a game using code</p> <p>I can utilise 'if' statements in creating coherent sequences of code</p>		<p>I can explain ways in which someone can build either of a positive or negative online reputation</p> <p>I can evaluate, design and create an effective web page whilst considering copyright, fair use of media, aesthetics and navigation paths</p>
Summer	<p>I can utilise 'while loops' tools in order to create efficient sequences of code</p> <p>I can debug variable sequences of code using all of my existing skills</p>	<p>I can use spreadsheets to organise and efficiently format data</p> <p>I can use formulas to create calculated data</p>	<p>I can create a variety of digital 3D models</p>