

# KS1 - Computing

Year 2						
Unit theme	Computing systems and networks	Creating Media	Programming A	Data and information	Creating media	Programming B
Unit title	IT around us (2.1)	Digital photography (2.2)	Robot algorithms (2.3)	Pictograms (2.4)	Digital music (2.5)	Programming quizzes (2.6)
I know that/how to...	<ul style="list-style-type: none"> <li>-To recognise the uses and features of information technology</li> <li>-To identify the uses of information technology in the school</li> <li>-To identify information technology beyond school</li> <li>-To explain how information technology helps us</li> <li>-To explain how to use information technology safely</li> <li>-To recognise that choices are made when using information technology</li> </ul>	<ul style="list-style-type: none"> <li>-To use a digital device to take a photograph</li> <li>-To make choices when taking a photograph</li> <li>-To describe what makes a good photograph</li> <li>-To decide how photographs can be improved</li> <li>-To use tools to change an image</li> <li>-To recognise that photos can be changed</li> </ul>	<ul style="list-style-type: none"> <li>-To describe a series of instructions as a sequence</li> <li>-To explain what happens when we change the order of instructions</li> <li>-To use logical reasoning to predict the outcome of a program</li> <li>-To explain that programming projects can have code and artwork</li> <li>-To design an algorithm</li> <li>-To create and debug a program that I have written</li> </ul>	<ul style="list-style-type: none"> <li>-To recognise that we can count and compare objects using tally charts</li> <li>-To recognise that objects can be represented as pictures</li> <li>-To create a pictogram</li> <li>-To select objects by attribute and make comparisons</li> <li>-To recognise that people can be described by attributes</li> <li>-To explain that we can present information using a computer</li> </ul>	<ul style="list-style-type: none"> <li>-To say how music can make us feel</li> <li>-To identify that there are patterns in music</li> <li>-To experiment with sound using a computer</li> <li>-To use a computer to create a musical pattern</li> <li>-To create music for a purpose</li> <li>-To review and refine our computer work</li> </ul>	<ul style="list-style-type: none"> <li>-To explain that a sequence of commands has a start</li> <li>-To explain that a sequence of commands has an outcome</li> <li>-To create a program using a given design</li> <li>-To change a given design</li> <li>-To create a program using my own design</li> <li>-To decide how my project can be improved</li> </ul>
Vocabulary introduced/embedded	<p>Information technology (IT), computer</p> <p>Information technology (IT), computer, barcode, scanner/scan</p>	<p>Device, camera, photograph, capture, image, digital</p> <p>Landscape, portrait</p> <p>Framing, subject, compose</p> <p>Light sources, flash, focus, background</p> <p>Editing, filter</p> <p>Format, framing, lighting, focus, filter</p>	<p>Instruction, sequence, clear, unambiguous, algorithm, program</p> <p>Sequence, order, algorithm, instructions</p> <p>Sequence, prediction, program</p> <p>Artwork, design, route, mat</p> <p>Algorithm</p> <p>Debugging, algorithm, program, decomposition</p>	<p>More than, less than, most, least, organise, data, object, tally chart, votes, total</p> <p>Pictogram, enter, data, tally chart, compare, more than, less than, objects, count</p> <p>Tally chart, data, pictogram, explain, more, less, most, least, more common, least common</p> <p>Attribute, group, same, different, object, more than/less than, most/least, compare, tally chart, pictogram, more than, less than, most popular, least popular, conclusion</p> <p>st/least</p> <p>Tally chart, pictogram, block diagram, most, least, common, sharing, data</p>	<p>Music, planets, Mars, Venus, war, peace, quiet, loud, feelings, emotions</p> <p>Pattern, rhythm, pulse</p> <p>Neptune, pitch, tempo, rhythm, notes</p> <p>Pattern, notes, instrument, tempo</p> <p>Create, emotion, pitch, pulse/beat, tempo, instrument, rhythm, notes</p> <p>Open, edit</p>	<p>Sequence, command, program, run, start</p> <p>Sequence, command, outcome, predict, program, blocks</p> <p>Sprite, algorithm, blocks, design, sequence, predict</p> <p>Actions, sprite, project, blocks, design, sequence, modify, change</p> <p>Design, algorithm, build, sequence, blocks, match</p> <p>Compare, design, debug, program, features, evaluate</p>

# KS1 - E-Safety

## Year 2

Unit title	Self-image & identity	Online Relationships	Online Reputation	Online Bullying	Managing Online Information	Health, Wellbeing and lifestyle	Privacy and security	Copyright and ownership
I know that/how to...	<p>I can explain how other people may look and act differently online and offline.</p> <p>I can give examples of issues online that might make someone feel sad, worried, uncomfortable or frightened; I can give examples of how they might get help.</p>	<p>I can give examples of how someone might use technology to communicate with others they don't also know offline and explain why this might be risky (e.g. email, online gaming, a pen-pal in another school/country).</p> <p>I can explain who I should ask before sharing things about myself or others online.</p> <p>I can describe different ways to ask for, give or deny my permission online and can identify who can help me if I am not sure.</p> <p>I can explain why I have a right to say, 'no' or 'I will have to ask someone'.</p> <p>I can explain who can help me if I feel under pressure to agree to something I am unsure about or don't want to do. I can identify who can help me if something happens online without my consent.</p> <p>I can explain how it may make others feel if I do not ask their permission or ignore their answers before sharing something about them online.</p> <p>I can explain why I should always ask a trusted adult before clicking 'yes', 'agree' or 'accept' online.</p>	<p>I can explain how information put online about someone can last for a long time.</p> <p>I can describe how anyone's online information could be seen by others.</p> <p>I know who to talk to if something has been put online without consent or if it is incorrect.</p>	<p>I can explain what bullying is, how people may bully others and how bullying can make someone feel.</p> <p>I can explain why anyone who experiences bullying is not to blame.</p> <p>I can talk about how anyone experiencing bullying can get help.</p>	<p>I can use simple keywords in search engines.</p> <p>I can demonstrate how to navigate a simple webpage to get to information I need (e.g. home, forward, back buttons; links, tabs and sections).</p> <p>I can explain what voice activated searching is and how it might be used, and I know it is not a real person (e.g. Alexa, Google Now, Siri).</p> <p>I can explain the difference between things that are imaginary, made up or make believe and things that are true or real.</p> <p>I can explain why some information I find online may not be real or true.</p>	<p>I can explain simple guidance for using technology in different environments and settings (e.g. accessing online technologies in public places and the home environment).</p> <p>I can say how those rules/guides can help anyone accessing online technologies.</p>	<p>I can explain how passwords can be used to protect information, accounts and devices.</p> <p>I can explain and give examples of what is meant by 'private' and 'keeping things private'.</p> <p>I can describe and explain some rules for keeping personal information private (e.g. creating and protecting passwords).</p> <p>I can explain how some people may have devices in their homes connected to the internet and give examples (e.g. lights, fridges, toys, televisions).</p>	<p>I can recognise that content on the internet may belong to other people.</p> <p>I can describe why other people's work belongs to them.</p>
Vocabulary introduced/embedded	<p>Online, offline</p> <p>Risk</p> <p>Online, emotions, avatar, identity, privacy, risk, trusted adult</p>	<p>Permission, online, trusted adult</p> <p>Online, consent, trusted adult</p> <p>Mood, online, options, decisions</p>	<p>Online, search, forever, digital, content, tab</p> <p>Information, profile, safer, username</p> <p>Trusted adult, sign up, information, online</p>	<p>Upset, unkind, behaviour, uncomfortable, nervous, embarrassed</p> <p>Bullying, self esteem, self love, fault, responsible, blame</p> <p>Trusted adult, support, advice, insecure</p>	<p>Webpage, home button, back button, forward button, links, tabs, sections, header, main body, footer, navigate, browser, scroll bars</p> <p>Search engine, voice activated, information, devices</p>	<p>Danger, risk, happy, healthy, safe, rule, trusted adult</p> <p>Rule, danger, risk, happy, healthy, safe</p>	<p>Information, private</p> <p>Password, safe, private, login</p> <p>Internet, wifi, devices</p>	<p>Belongs to me, belongs to you,</p> <p>Copy, permission, original</p>