



Kingsway Primary School

Computing Knowledge Progression Map

EYFS

Technology Awareness	Early Programming & Computational Thinking	Problem Solving & Debugging Behaviours	Digital Creativity	Data Awareness	Fine Motor & Tool Control	Online Safety & Digital Literacy
Know how technology helps people; names and purposes of everyday devices; different technologies do different jobs.	Know that instructions tell something what to do; instructions follow an order; changing instructions changes outcomes.	Know that mistakes help learning; problems can be solved by trying again; adults can help.	Know that digital tools create pictures, music, photos; choices affect outcomes; work can be shared.	Know that items can be grouped; patterns help organisation; information helps us learn.	Know that technology must be handled carefully; tools control devices; practice builds confidence.	Know simple rules keep them safe; adults help with safety; screen time is balanced.

Key Stage 1 and 2

Computing Skills Progression Map



	Online Safety	Computing Systems and Networks	Programming	Data and Information	Creating Media	Information Technology & Digital Literacy
Year 1	Know what personal information is; know rules for using technology safely; know that trusted adults help keep them safe.	Know what technology is; know the names and purposes of common devices.	Know what an algorithm is; know that programs follow instructions.	Know that data is information; know that data can be grouped.	Know that digital tools can create text and pictures.	Know basic keyboard and mouse functions; know how to save work with support.
Year 2	Know ways to stay safe online; know how to be kind and respectful online; know who to talk to if worried.	Know how IT is used in home, school, and the wider world.	Know that programs run in sequence; know that errors can be fixed (debugging).	Know that data can be collected and shown in pictograms.	Know that digital media can include sound and images for a purpose.	Know how to combine different media types; know how to organise digital work.
Year 3	Know common online risks; know how to report concerns; know that not all online information is true.	Know that computers connect to form networks; know input, process, and output.	Know that repetition (loops) can shorten programs; know that programs respond to events.	Know that branching databases help classify information.	Know that layout, font, and images affect how information is understood.	Know how files are stored and retrieved.
Year 4	Know what an online identity is; know how data is shared; know how online actions affect others.	Know what the internet is; know how information travels using networks.	Know different types of loops; know how events control program behaviour.	Know that data can be organised, analysed, and presented digitally.	Know how audio can be planned, recorded, and edited for an audience.	Know how digital images can be improved through editing.
Year 5	Know what a digital footprint is; know how personal data can be used; know how to judge online reliability.	Know what a computer system is; know how search engines find and rank results.	Know how selection (if/then/else) changes program outcomes; know how inputs affect physical devices.	Know what flat-file databases and spreadsheets are; know how data can be sorted and filtered.	Know how video is planned using storyboards and edited to improve quality.	Know how spreadsheets perform calculations using formulas.
Year 6	Know how manipulation and scams work; know legal and ethical responsibilities online; know how to manage privacy independently.	Know how online services support collaboration; know that systems rely on networks and rules (protocols).	Know what variables are; know how sensors and inputs control program responses.	Know that data can be biased or inaccurate; know how data supports decision-making.	Know how 3D models and websites are designed for navigation, accessibility, and audience.	Know how digital tools support collaboration and communication.

