

Our Computing Progression Map is split into **Aspects**.

These Aspects are organised into our **4 Big Ideas**.

Computing systems and networks

- Computer systems
- Computer networks

Programming

- Programming
- Algorithms
- Design and development

Data and information

- Data and information

Creating media

- Creating media
- Design and development

COMPUTING SYSTEMS AND NETWORKS					
Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Knowledge Technology around us Skill Recognising technology in school and using it responsibly.	Knowledge Information technology around us Skill Identifying IT and how its responsible use improves our world in school and beyond.	Knowledge Connecting computers Skill Identifying that digital devices have inputs, processes, and outputs, and how devices can be connected to make networks.	Knowledge The internet Skill Recognising the internet as a network of networks including the WWW, and why we should evaluate online content.	Knowledge Systems and searching Skill Recognising IT systems in the world and how some can enable searching on the internet.	Knowledge Communication and collaboration Skill Exploring how data is transferred by working collaboratively online.

CREATING MEDIA					
Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Knowledge Digital painting Skill Choosing appropriate tools in a program to create art, and making comparisons with working non-digitally.	Knowledge Digital photography Skill Capturing and changing digital photographs for different purposes.	Knowledge Stop-frame animation Skill Capturing and editing digital still images to produce a stop-frame animation that tells a story.	Knowledge Audio production Skill Capturing and editing audio to produce a podcast, ensuring that copyright is considered.	Knowledge Video production Skill Planning, capturing, and editing video to produce a short film.	Knowledge Webpage creation Skill Designing and creating webpages, giving consideration to copyright, aesthetics, and navigation.

PROGRAMMING A

Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Knowledge Moving a robot Skill Writing short algorithms and programs for floor robots, and predicting program outcomes.	Knowledge Robot algorithms Skill Creating and debugging programs, and using logical reasoning to make predictions.	Knowledge Sequencing sounds Skill Creating sequences in a block-based programming language to make music.	Knowledge Repetition in shapes Skill Using a text-based programming language to explore count-controlled loops when drawing shapes.	Knowledge Selection in physical computing Skill Selection in physical computing.	Knowledge Variables in games Skill Exploring variables when designing and coding a game.

DATA AND INFORMATION

Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Knowledge Grouping data Skill Exploring object labels, then using them to sort and group objects by properties.	Knowledge Pictograms Skill Collecting data in tally charts and using attributes to organise and present data on a computer.	Knowledge Branching databases Skill Building and using branching databases to group objects using yes/no questions.	Knowledge Data logging Skill Recognising how and why data is collected over time, before using data loggers to carry out an investigation.	Knowledge Flat-file databases Skill Using a database to order data and create charts to answer questions.	Knowledge Introduction to Spreadsheets Skill Answering questions by using Spreadsheets to organise and calculate data.

CREATING MEDIA

Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Knowledge Digital writing Skill Using a computer to create and format text, before comparing to writing non-digitally.	Knowledge Digital music Skill Using a computer as a tool to explore rhythms and melodies, before creating a musical composition.	Knowledge Desktop publishing Skill Creating documents by modifying text, images, and page layouts for a specified purpose.	Knowledge Photo editing Skill Manipulating digital images, and reflecting on the impact of changes and whether the required purpose is fulfilled.	Knowledge Introduction to vector graphics Skill Creating images in a drawing program by using layers and groups of objects.	Knowledge 3D modelling Skill Planning, developing, and evaluating 3D computer models of physical objects.

PROGRAMMING B

Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Knowledge Programming animations Skill Designing and programming the movement of a character on screen to tell stories.	Knowledge Programming quizzes Skill Designing algorithms and programs that use events to trigger sequences of code to make an interactive quiz.	Knowledge Events and actions in programs Skill Writing algorithms and programs that use a range of events to trigger sequences of actions.	Knowledge Repetition in games Skill Using a block-based programming language to explore count-controlled and infinite loops when creating a game.	Knowledge Selection in quizzes Skill Exploring selection in programming to design and code an interactive quiz.	Knowledge Sensing movement Skill Designing and coding a project that captures inputs from a physical device.