Computing Progression Plan Years 1 – 6

Aspect	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Algorithms	Give simple instructions to everyday devices to make things happen.	Recognise 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 explain how a simple algorithm works.	Detect and correct errors in algorithms and programs (debug)	With support, begin to produce algorithms by using logical and appropriate structures and sequencing to organise data, and create a precise and accurate sequence of instructions.	Independently, produce accurate and precise algorithms, using logical and appropriate structures to organise and record data.
Computational thinking	Create simple programs.	Create and debug simple programs.	Use sequence, selection and repetition in programs.	Test programs using models and stimulations. Design and write programs.	Use sequence, selection and repetition in programs; begin to work with variables and forms of input and output.	Use sequence, selection and repetition in programs; begin to work with variables and forms of various input and output. Create flowcharts and other diagrams to explain how a process model works.
Solving problems	Solve simple problems, using Computing.	Use logical reasoning to predict the behaviour of simple programs.	Analyse and tackle errors by decomposing into smaller parts.	Use logical reasoning to detect errors, make changes and find out what happens as a result.	Use logical reasoning to solve errors and model situations and processes. Predict what will happen when variables and rules are changed within a model.	Independently, use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.
Computing networks – knowledge and understanding	Show an awareness of the internet and discuss how and when they use it in everyday life.	Understand what the internet is and how it can be used. Explain how and when they use it in everyday life. Recognise other common uses of information technology beyond school.	Demonstrate a knowledge of computer systems and networks, including storage devices, the internet and the world wide web.	Demonstrate a knowledge and understanding of computing systems and networks including storage device, the internet and the world wide web.	Understand computer networks including the internet and how they can provide multiple services, such as the world wide web.	Understand computer networks including the internet and how they can provide multiple services, such as the world wide web and the opportunities they offer for communication and collaboration.
Computing networks – using and applying	Complete simple searches on the internet by following instructions.	Complete simple tasks on the internet by following instructions. Begin to save, edit and store work in network folders.	Use search engines effectively. Be able to save, edit, store and retrieve work in network folders.	Use software and search engines effectively. Be able to save, edit, search, store and retrieve images and documents in network folders.	Use software and search engines effectively. Be able to save, search, edit, store, manipulate and retrieve different files in network folders.	Use software and search engines effectively. Be able to save, search, store, manipulate and retrieve different files in network folders and on the internet.

All things are possible if you believe Mark 9:23

Computing Progression Plan Years 1 – 6

Digital literacy – knowledge, understanding, using and applying	Show an awareness of information in different formats. Make decisions about whether or not statements or images found online are likely to be true.	Understand that information is presented in different formats. Decide whether or not to trust information and images found online.	Begin to develop skills when being discerning in evaluating digital content. Identify and select appropriate information. Use different approaches to searching and retrieving digital information.	Evaluate the success of their searches and the information provided. Use and combine a variety of software and internet services on different devices to accomplish goals, including collecting and analysing data.	Recognise the need for accuracy when searching and selecting information. Use different sources to double check information. Use and combine a variety of software and internet services on different devices to accomplish goals, including collecting, analysing and presenting data.	Appreciate how results are selected and ranked and be discerning in evaluating digital content. Use and combine a variety of software and internet services on different devices to accomplish goals, including collecting, analysing, evaluating and presenting data and information.
E-safety	Understand and follow rules around e-safety and know who to tell if something concerns them online.	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.	Identify ways to keep safe online. Use technology safely and recognise online behaviours that would be unfair. Show respect for individuals and report concerns.	Recognise social networking sites and make judgements in order to stay safe online. Know who to tell if anything worries them online. Identify potential risks. Use Computing sensibly, securely and safely.	Use technology safely, respectfully and responsibly. Be able to judge the level of risks online and when to answer questions online and when not to. Be a good online citizen and friend. Articulate what constitutes good behaviour online.	Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report on concerns about content and contact.
Data – knowledge, understanding, using and applying	Explain that images give information. Sort objects and pictures in lists or simple tables.	Explain that images and pictograms give information and input data to create a pictogram. Read and present data in a simple Y/N branching diagram or tree and block graphs.	Explain that data can be presented in different ways. Read and input data to create pictograms, tables, bar charts and a branching diagram or tree.	Recognise different ways of reading and presenting data. Interpret data from pictograms, branching diagrams, bar charts and time graphs. Input data to create bar charts and time graphs.	Recognise and describe the different ways of reading and presenting data. Interpret data from branching diagrams, bar charts, time graphs and timetables. Input data to create time graphs and timetables.	Recognise and describe the different ways of reading and presenting data. Be able to interpret data from all previous year groups confidently. Input data to create pie charts and line graphs.
Creative presentations and digital content	Use technology purposefully to create, store and retrieve images, videos and word-processing documents.	Use technology purposefully to create, organise, store, manipulate and retrieve images, digital photographs videos, word-processing documents and presentations.				

All things are possible if you believe Mark 9:23

Computing Progression Plan Years 1 – 6

All things are possible if you believe Mark 9:23