Computing Year A		
Y1/2		
Autumn	**Spring**	**Summer**
2.1 Programming Have a clear understanding of algorithms as sequences of instructions. • Convert simple algorithms to programs. • Predict what a simple program will do. • Spot and fix (debug) errors in their programs. **2.2 Game Testers** Describe carefully what happens in computer games. • Use logical reasoning to make predictions of what a program will do. • Test these predictions. • Think critically about computer games and their use. • Be aware of how to use games safely and in balance with other activities.	**1.4 Collectors** Find and use pictures on the web. • Know what to do if they encounter pictures that cause concern. • Group images on the basis of a binary (yes/no) question. • Organise images into more than two groups according to clear rules. • Sort (order) images according to some criteria. • Ask and answer binary (yes/no) questions about their images. **2.4 Researchers** Develop collaboration skills through working as part of a group. • Develop research skills through searching for information on the internet. • Improve note-taking skills through the use of mind mapping. • Develop presentation skills through creating and delivering a short multimedia presentation.	**2.5 Detectives** Understand that email can be used to communicate. • Develop skills in opening, composing and sending emails. • Gain skills in opening and listening to audio files on the computer. • Use appropriate language in emails. • Develop skills in editing and formatting text in emails. • Be aware of e-safety issues when using email. **2.6 Zoologists** Sort and classify a group of items by answering questions. • Collect data using tick charts or tally charts. • Use simple charting software to produce pictograms and other basic charts. • Take, edit and enhance photographs. • Record information on a digital map.

Y3/4		
Autumn	**Spring**	**Summer**
3.1Programmers Create an algorithm for an animated scene in the form of a storyboard. • Write a program in Scratch to create the animation. • Correct mistakes in their animation programs. **3.2 Bug Fixers** Develop a number of strategies for finding errors in programs. • Build up resilience and strategies for problem solving. • Increase their knowledge and understanding of Scratch. • Recognise a number of common types of bug in software.	**3.3 Presenters** Gain skills in shooting live video, such as framing shots, holding the camera steady, and reviewing. • Edit video, including adding narration and editing clips by setting in/out points. • Understand the qualities of effective video, such as the importance of narrative, consistency, perspective and scene length. **3.4 Network engineers** Understand the physical hardware connections necessary for computer networks to work. • Understand some features of internet protocols. • Understand some diagnostic tools for investigating network connections. • Develop a basic understanding of how domain names are converted to IP addresses.	**3.5 Communicators** Develop a basic understanding of how email works. • Gain skills in using email. • Be aware of broader issues surrounding email, including 'netiquette' and e-safety. • Work collaboratively with a remote partner. • Experience video conferencing. **3.6 Opinion poll** Understand some elements of survey design. • Understand some ethical and legal aspects of online data collection. • Use the web to facilitate data collection. • Gain skills in using charts to analyse data. • Gain skills in interpreting results.
Y5/6		
Autumn	**Spring**	**Summer**
5.3 Artists Develop an appreciation of the links between	**5.6 Architects** Understand the work of architects, designers and	**6.6. Marketeers** Consider key marketing messages, including

geometry and art. • Become familiar with the tools and techniques of a vector graphics package. • Develop an understanding of turtle graphics. • Experiment with the tools available, refining and developing their work as they apply their own criteria to evaluate it and receive feedback from their peers. • Develop some awareness of computer generated art, in particular fractal-based Landscapes. 5.5 Bloggers Become familiar with blogs as a medium and a genre of writing. • Create a sequence of blog posts on a theme. • Incorporate additional media. • Comment on the posts of others. • Develop a critical, reflective view of a range of media, including text.	engineers working in 3D. • Develop familiarity with a simple CAD (computer aided design) tool. • Develop spatial awareness by exploring and experimenting with a 3D virtual environment. • Develop greater aesthetic awareness	identifying a unique selling point. • Develop a printed flyer or brochure incorporating text and images. • Further develop knowledge, skills and understanding in relation to creating a website. • Further develop skills relating to shooting and editing video. **See also DT control**