Computing		Year 1
Autumn Term	**Spring Term**	**Summer Term**
Graphic Modelling *(N.C. Ref: use technology purposefully to create, organise, store, manipulate and retrieve digital content)* Understand that a computer can be used to simulate or model an environment. Know that representations of real or fantasy situations can be made in many different ways. Use a painting program to create a representation of a scenario. Select and add stamps or clip art to a scene to save time. Understand that work can be saved and retrieved for editing. *(Software – J2e: JIT5 paint)* **Introduction to Keyboard Skills** *(N.C. Ref: use technology purposefully to create, organise, store, manipulate and retrieve digital content)* Understand that words can be used to convey information. Understand that text / words come in different sizes, colours and styles. Enter single letters to type names – edit style, colour etc.. Use a word bank to create simple sentences about a topic. Produce text on screen to accompany a picture. Understand that work can be saved and retrieved for editing. *(Software – J2e: JIT5 writing; Pages on iPad)*	**Coding 1: Moving objects** *(N.C. Ref: understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions)* Introducing children to concept of coding. Create a sequence of instructions to make things happen. Children will learn to make characters move in a given direction following a specific action. They will then apply these skills to create an 'app' of their own. *(Software – Espresso Coding Year 1a)* **Representing information** *(N.C. Ref: use technology purposefully to create, organise, store, manipulate and retrieve digital content)* Recognize that there is a connection between data collected, sorted and classified, and a pictogram. Recognize that data can be represented by pictograms and that the longer the column in a pictogram, the greater the value. Use a pictogram to help answer simple questions or surveys. Enter data into a graphing package to create a pictogram and use it to find answers to simple questions or surveys. Use a graphing package to produce a pictogram of collected data. Present verbally what they have learnt from their pictograms. *(Software – J2e: JIT5 Pictogram)*	**Coding 2: Simple inputs** *(N.C. Ref: understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions)* Building on the learning from the previous coding activity, children will make objects move or disappear when they are either clicked or pressed, depending on the platform (tablet or keyboard). They will then create an app, where objects move or disappear when clicked or pressed. *(Software – Espresso Coding Year 1b)* **Understanding instructions: Beebots** *(N.C. Ref: understand 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 predict the behaviour of simple programs)* Recognise that machines and devices have to be controlled. Recognise that some machines and devices work by using a sequence of instructions. Understand that instructions need to be given in a certain logical order. Recognise the importance of precision in instructions. Write a sequence of instructions (building to instructions for others to carry out). Predict the outcome of a set of instructions and test the results. Write sets of instructions and interpret them correctly; make and test predictions. *(Hardware – Beebot floor robots)*