Computing		Year 3
Autumn Term	**Spring Term**	**Summer Term**
Combining text and graphics *(N.C. Ref: select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information)* Create text for an audience / purpose. Design layouts by choosing appropriate settings. Incorporate saved images / images sources online. Loading saved work. Producing final story composition. *(Software – Pages on iPad, J2e5)* **Coding 1: Sequence and Animation** *(N.C. Ref: use sequence, selection, and repetition in programs; work with variables and various forms of input and output.)* Begin to introduce the element of time to sequences of instructions Making objects appear, disappear and move after a given, variable, time limit Reintroducing skills learned previously, making objects move after different inputs Create an app applying skills learned, making several objects move after varying time intervals and inputs *(Software – Espresso Coding Year 3a)*	**Coding 2: Conditional events** (N.C. Ref: design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts; use sequence, selection, and repetition in programs; work with variables and various forms of input and output) Children learn to code with 'if' statements, which select different pieces of code to execute depending on what happens to other objects. Children will make objects move using a variety of inputs, before creating other actions as a result. Children will start to design backgrounds for their apps *(Software – Espresso Coding Year 3b)* **Introduction to Databases – (Link to Science – Materials and their properties)** *(N.C. Ref: select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information).* Collect and store information in an organised way and use this to find answers to questions. Understand that information on record cards is divided into fields and that a set of record cards is called a file Know that information can be held as numbers, choices (such as yes/no) or words and that information can be taken from pictures or text. Store, sort and retrieve information from a database that has been created. Use a database to produce bar charts, sort and classify information and to present findings. *(Software – J2Data – Branch)*	**Presenting Information** *(N.C. Ref: select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information)* Using iPads to record video to present information as part of topic. Skills developed include: Create storyboard to plan recordings Plan direction Video recording Video editing using Movie Maker (ordering clips, shortening clips, adding text / credits / music). *(Software – Movie Maker on iPad)* **Coding 3: Introduction to Scratch Jr.** *(N.C. Ref: use sequence, selection, and repetition in programs; work with variables and various forms of input and output; use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs)* Children will be introduced to 'drag and drop' coding with Scratch Jr. and that sets of instructions are known as algorithms. Skills built over unit to conclude with children creating their own animated sequence. Begin with introduction to interface, with children learning the button commands. Skills developed to include moving 'sprite' across screen, different types of movement, speed, repeat commands and commands that respond to input. Children should also be given debug exercises, correcting code to achieve set goals. *(Software – Scratch Jr on iPad)*