#### Programming

(Algorithms, Sequencing and testing code)

Beebot / Roamer / Probot

## Scratch Animated Stories.

# Computer Science

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. Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.

This unit builds on the previous unit in Year 5 (Scratch: Developing Games) as well as prior units introducing Scratch in Year 2 and Year 4. The unit is designed to help children in continuing to develop their skills in writing their own algorithms as well as editing and debugging existing codes. New skills are introduced to structure code and animate characters and scenes, gradually building to create a short animated story. These lessons are intended for use in conjunction with Scratch 2 software installed.

## Communication Publishing and collaborating

( Multimedia Word Processing)

#### IT Skills

### **Spreadsheets**

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.

Children are given an understanding of spreadsheets and how

## Film Making

Select, use and combine a variety of software to design and create a range of programs, systems and content that accomplish given goals.

Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content.

Understand computer networks including the internet and the

they can be used. In the first five lessons, a different spreadsheet template is provided in which children learn skills in formatting and entering specific formulas. Lessons 4 and 5 include investigative skills in using the spreadsheet to solve specific problems. Examples include number calculations, sports league tables, test scores, and budget planning. The final lesson allows an open-ended task for pupils to design their own spreadsheet, with ideas and direction provided for particular purposes. This final lesson can also be used for some pupils to return to or complete any previous spreadsheet tasks which may not have been finished.

opportunities they offer for communication and collaboration.

Use a variety of software on a range of digital devices to design and create a range of content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information

This aim of this unit is to allow children to explore various aspects of film-making. In doing so, they must choose and use appropriate software in order to complete tasks such as writing a script, researching information, filming and editing. As well as using digital devices for recording (video camera or tablet), children work through pre- and post-production stages, planning good-quality interviews for a documentary and completing the process with use of video editing software such as Windows Movie Maker. You may like to complete the unit with a special screening or awards ceremony for the budding young film-makers!

#### Online Safety

Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact

In this unit about online safety, children will be taking a more in depth look at a variety of online safety issues, most of which they will have been familiarized with in previous years. They will be introduced to the idea of the internet, as a type of media, and how it can shape our ideas about boys and girls through stereotypes. Children will be given ways to deal with online content that they find worrying or even believe to be dangerous