

Module number	Unit summary	Learning objectives
Using Hunters treasure 1.1- We are	In this unit, the children will program a toy to move around a map to find buried treasure. They will start by thinking of algorithms for their routes, then input these as stored programs for the robot. They predict how the robot will move and will debug their programs.	This unit will enable the children to: understand that a programmable toy can be controlled by inputting a sequence of instructions develop and record sequences of instructions as an algorithm program the toy to follow their algorithm debug their programs predict how their programs will work.
steps of a Filming the chefs 1.2- We are tv	In this unit, pupils produce short videos of themselves making a healthy meal or snack. They also decompose a complex problem into smaller parts – an important idea from computer science.	This unit will enable the children to: break down a process into simple, clear steps, as in an algorithm use different features of a video camera use a video camera to capture moving images develop collaboration skills discuss their work and think about how it could be improved.
eBook Illustrating an 1.3- We are painters	This unit will particularly engage children who love the illustrations in the books they read. It is a great opportunity for the children to work creatively.	This unit will enable the children to: use the web safely to find ideas for an illustration select and use appropriate painting tools to create and change images on the computer understand how this use of ICT differs from using paint and paper create an illustration for a particular purpose know how to save, retrieve and change their work reflect on their work and act on feedback received.
the web. Finding images using 1.4- We are collectors	In this unit, the pupils will use web search engines to collect pictures of different types of animals and then explore ways in which those pictures can be organised.	This unit will enable the children to: 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.

<p>1.5- We are Storytellers Producing a talking book.</p>	<p>In this unit, the children create a talking book that they can share with others.</p>	<p>This unit will enable the children to: use sound recording equipment to record sounds develop skills in saving and storing sounds on the computer develop collaboration skills as they work together in a group understand how a talking book differs from a paper-based book talk about and reflect on their use of ICT share recordings with an audience.</p>
<p>1.6- We are celebrating digitally Creating a card</p>	<p>In this unit, pupils will have the opportunity to create a digital greetings card, which could be used for a religious festival such as Diwali or Christmas, pupils' birthdays, or simply to say thank you or good luck.</p>	<p>This unit will enable the children to: develop basic keyboard skills, through typing and formatting text develop basic mouse skills use the web to find and select images develop skills in storing and retrieving files develop skills in combining text and images discuss their work and think about whether it could be improved.</p>
<p>2.1 We are astronauts Programming on screen</p>	<p>In this unit, the children will build on work from <i>Unit 1.1 – We are treasure hunters</i> to program a sprite (such as a spaceship) to move around the screen. This unit acts as a springboard for programming in Year 3.</p>	<p>This unit will enable the children to: 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.</p>
<p>2.2 We are games testers Exploring how computer games</p>	<p>In this unit, the pupils will try to work out how some simple Scratch games work. They also look at free online or open source games and share their favourite games with the class.</p>	<p>This unit will enable the children to: 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.</p>

<p>2.3 We are photographers Taking better photos</p>	<p>In this unit, the children review photos online, practise using a digital camera, take photos to fit a given theme, edit their photos, and then select their best images to include in a shared portfolio.</p>	<p>This unit will enable the children to: consider the technical and artistic merits of photographs use a digital camera or camera app take digital photographs review and reject or pick the images they take edit and enhance their photographs select their best images to include in a shared portfolio.</p>
<p>2.4 We are researchers Researching a topic</p>	<p>The children research a topic – safely, effectively and efficiently – using a structured approach (mind mapping). They share their findings with others through a short multimedia presentation.</p>	<p>This unit will enable the children to: 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.</p>
<p>2.5 We are detectives Collecting clues</p>	<p>In this unit, the children are challenged to solve a mystery by reading, sending and replying to emails, and by listening to a witness statement. They use a fact file sheet to create a table and identify the culprit.</p>	<p>This unit will enable the children to: 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.</p>
<p>2.6 We are zoologists Collecting data about bugs</p>	<p>In this unit, the children go on a bug hunt, recording and identifying the small animals they find. They then organise the data they have collected, record it using a graphing package, and interpret the graph to answer questions about the animals.</p>	<p>This unit will enable the children to: 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.</p>