

# YEAR 1: TUCANA - COMPUTING CURRICULUM FRAMEWORK

## Overview of Key Stage 1 Curriculum:

A high-quality computing education equips pupils to use computational thinking and creativity to understand and change the world. Computing has deep links with mathematics, science, and design and technology, and provides insights into both natural and artificial systems. The core of computing is computer science, in which pupils are taught the principles of information and computation, how digital systems work, and how to put this knowledge to use through programming. Building on this knowledge and understanding, pupils are equipped to use information technology to create programs, systems and a range of content. Computing also ensures that pupils become digitally literate – able to use, and express themselves and develop their ideas through, information and communication technology – at a level suitable for the future workplace and as active participants in a digital world.

AUTUMN TERM 1	AUTUMN TERM 2	SPRING TERM 3
<b>SUPERHEROES</b>	<b>BEAT BAND BOOGIE</b>	<b>DINOSAUR PLANET</b>
<p><b>CO 4 Use technology purposefully to create, organise, store, manipulate and retrieve digital content</b></p> <p>Watch cartoons and short films with live action, animated and computer-generated superheroes. Drag and drop saved images of their favourite superheroes onto a blank presentation slide. Arrange and resize the images to make a superhero montage and print it out</p> <p>Look at pictures of superheroes in different poses such as running, jumping, landing, throwing and fighting. Imitate these poses and take photographs of each other. Select their favourite pose before uploading to a drawing software package. Use the drawing tools to add superhero features such as a mask, initialled outfit and cape to their photograph</p> <p>Use internet search engines to 'follow' real-life heroes from organisations such as Mountain Rescue or the RNLI. Select the latest incidents link to 'observe' how these amazing people are helping the public numerous</p>		<p><b>CO 3 Use logical reasoning to predict the behaviour of simple programs</b></p> <p>Make a dinosaur disguise for a floor robot and send him on a journey around a prehistoric landscape. Create a large map showing features such as volcanoes, waterfalls, rivers, forests and caves. Place a transparent grid over the top of the map and programme the robot to move from different points</p>

<p><b>CO 6 Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies</b></p> <p>Learn about keeping safe when using the web. Watch some of the many animated internet safety resources and find out how to recognise an internet baddie and who to tell about it. Discuss and share ideas for safely using ICT and make a class list of golden rules to display next to the school computers</p>		
		Events: Safer Internet Day
<b>SPRING TERM 4</b>	<b>SUMMER TERM 5</b>	<b>SUMMER TERM 6</b>
<b>TOWERS, TUNNELS AND TURRETS</b>	<b>WRIGGLE AND CRAWL</b>	<b>LAND AHOY</b>
<p><b>C6 Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.</b></p> <p>Tying in with internet safety day, children learn about how to stay safe on the internet and what information is and is not safe to share online. We also discuss what to do and who to tell if we are worried about something we have seen. Children produce their own posters / leaflets to inform and explain to other children what they should do in order to remain safe when using the internet.</p> <p><b>C4 Use technology purposefully to create, organise, store, manipulate and retrieve digital content</b></p> <p><b>C5 Recognise common uses of information technology beyond school</b></p>	<p><b>C5 Recognise common uses of information technology beyond school. C4</b></p> <p>We watch live webcam footage of bees in a bee colony as they come and go from the hive and perform their duties, including the waggle dance.</p> <p><b>C4 Use technology purposefully to create, organise, store, manipulate and retrieve digital content. C5</b></p> <p>Children use computers to design and make branching databases containing a range of minibeasts. When they are complete the finished databases allow users to identify minibeasts, which they have found, using the database, through answering a range of scripted questions.</p>	<p><b>C4 Use technology purposefully to create, organise, store, manipulate and retrieve digital content</b></p> <p><b>C5 Recognise common uses of information technology beyond school</b></p> <p>Children use the internet to research lifeboats in the UK and locate our nearest lifeboat station using the RNLI website and Google Maps.</p>

Children use the BBC nature website and videos to find out about burrowing animals, before writing their own information texts.					
Events: NSPCC 'Share Aware' assembly					
<b>Subject content: Key stage 1</b>					
Pupils should be taught to understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions	Pupils should be taught to create and debug simple programs	Pupils should be taught to use logical reasoning to predict the behaviour of simple programs	Pupils should be taught to use technology purposefully to create, organise, store, manipulate and retrieve digital content	Pupils should be taught to recognise common uses of information technology beyond school	Pupils should be taught to use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about material on the internet or other online technologies