

# Computing



AIM  
Federation of Schools

# Computing

Our curriculum for computing aims to ensure that all pupils:

- can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation
- can analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems
- can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems
- are responsible, competent, confident and creative users of information and communication technology

## Key Knowledge:

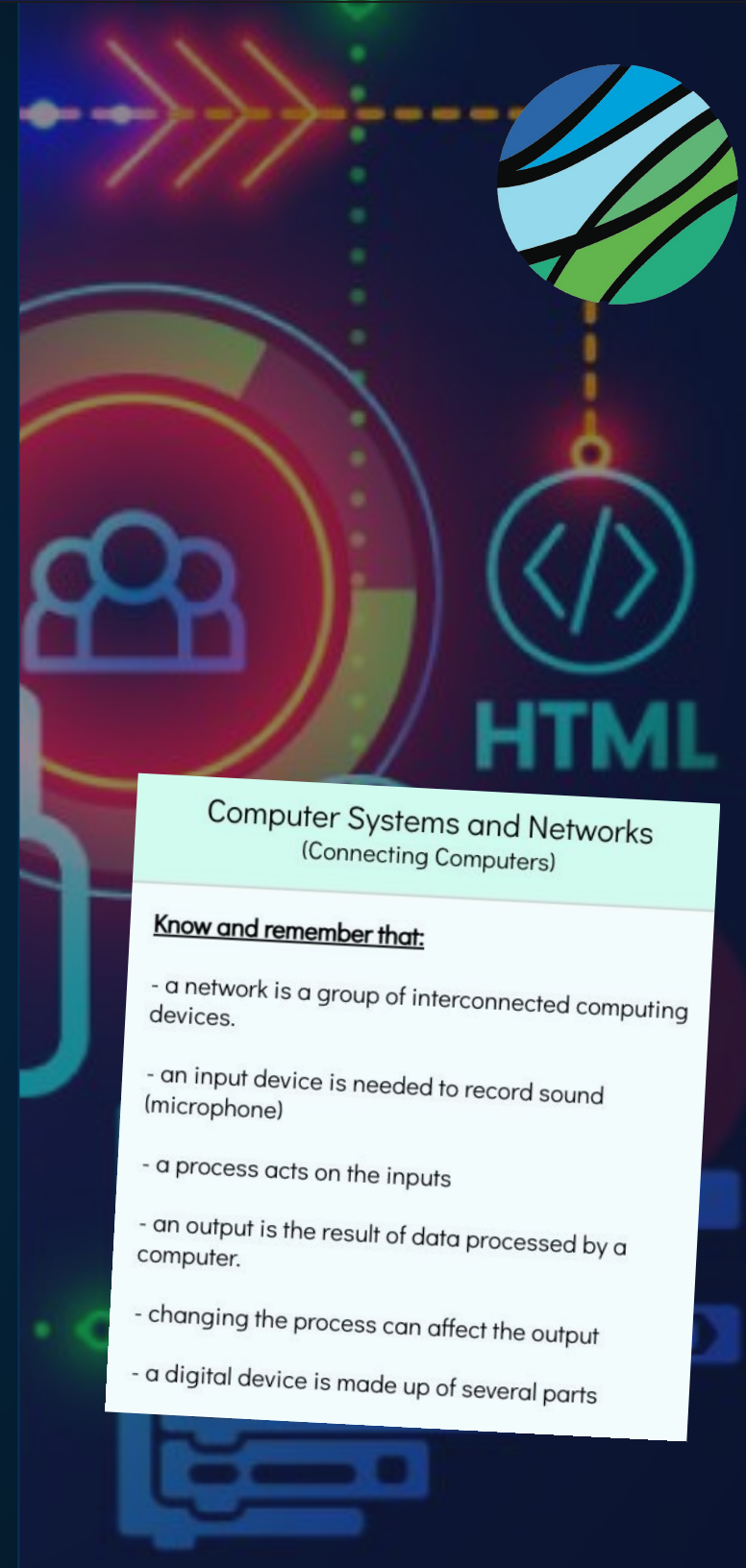
Our CT 'Know and Remembers'

We ensure that children know and remember key facts and information so that they can be successful in the subject they are learning. Children learn best when they are able to connect, retrieve and rehearse. Our lessons ensure that children have the opportunity to do all three of these things through carefully planned sequences of learning.

## Key Skills:

Our CT Skills

Skills is a learned ability to do something well. Children at the Coastal Together Federation learn skills alongside knowledge. They have opportunities to practice and rehearse skills so that they are able to apply and make links between learning.



### Computer Systems and Networks (Connecting Computers)

#### Know and remember that:

- a network is a group of interconnected computing devices.
- an input device is needed to record sound (microphone)
- a process acts on the inputs
- an output is the result of data processed by a computer.
- changing the process can affect the output
- a digital device is made up of several parts

# EYFS: MIS and Freethorpe



Area of Curriculum	Autumn 1 'All About Me'	Autumn 2 'Places'	Spring 1 'People'	Spring 2 'Past and Present'	Summer 1 'Growing'	Summer 2 'All Creatures Great and Small'
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Computing	Discipline		Programming	Safety and Security/Computer Systems and Networks	Creating Media/Data and Information	Programming
	Taught through direct teaching		<p>Can I make a floor robot move?</p> <p>Can I use simple software to make something happen?</p> <p>Can I make choices about the buttons and icons I press, touch or click on?</p>	<p>Can I tell you about technology that is used at home and in school?</p> <p>Can I operate simple equipment?</p> <p>Can I use a safe part of the Internet to play and learn?</p> <p>Can I understand that extended periods of time on technology isn't good for them?</p>	<p>Can I move objects on a screen?</p> <p>Can I create shapes and text on a screen?</p> <p>Can I use technology to show my learning?</p> <p>Can I tell you about different kinds of information such as pictures, video, text and sound?</p>	<p>Can I make a floor robot move?</p> <p>Can I use simple software to make something happen?</p> <p>Can I make choices about the buttons and icons I press, touch or click on?</p>
	Taught through continuous provision/enhanced provision	<ul style="list-style-type: none"> <li>• Beebots</li> <li>• Multimedia - creating shapes and text on the board</li> <li>• Ipads/Chromeboards</li> </ul>				



# KS1: Curriculum Overview



KS1	Year A			Year B		
	Autumn Term	Spring Term	Summer Term	Autumn Term	Spring Term	Summer Term
	Once Upon A Time	Let's Go Exploring	Crowns and Castles	Celebrations	London's Calling	Ahoy There
	<a href="#">Digital Painting</a> (Creating Media)	<a href="#">Digital Photography</a> (Creating Media)	<a href="#">Technology Around Us</a> (Computer Systems and Networks)	<a href="#">Moving A Robot</a> (Programming)	<a href="#">Robot Algorithms</a> (Programming)	<a href="#">Grouping Data</a> (Data and Information)
	<a href="#">Digital Writing</a> (Creating Media)	<a href="#">Digital Music</a> (Creating Media)	<a href="#">IT Around Us</a> (Computer Systems and Networks)	<a href="#">Programming Animations</a> (Programming)	<a href="#">Programming Quizzes</a> (Programming)	<a href="#">Pictograms</a> (Data and Information)
	Safety and Security			Safety and Security		
	Year C			Year D		
	Autumn Term	Spring Term	Summer Term	Autumn Term	Spring Term	Summer Term
	Let's Fly Away	Way Down Under...	Infinity and Beyond	Then and Now	Bright lights, Big City	Helping Hands
	<a href="#">Digital Painting</a> (Creating Media)	<a href="#">Digital Photography</a> (Creating Media)	<a href="#">Technology Around Us</a> (Computer Systems and Networks)	<a href="#">Moving A Robot</a> (Programming)	<a href="#">Robot Algorithms</a> (Programming)	<a href="#">Grouping Data</a> (Data and Information)
<a href="#">Digital Writing</a> (Creating Media)	<a href="#">Digital Music</a> (Creating Media)	<a href="#">IT Around Us</a> (Computer Systems and Networks)	<a href="#">Programming Animations</a> (Programming)	<a href="#">Programming Quizzes</a> (Programming)	<a href="#">Pictograms</a> (Data and Information)	
Safety and Security			Safety and Security			

# LKS2: Curriculum Overview



LKS2

Year A			Year B		
Autumn Term	Spring Term	Summer Term	Autumn Term	Spring Term	Summer Term
From Stones to Steel	Resourceful Rainforests	Walk like an Egyptian	The Romans	Invaders and Settlers	Navigating Norfolk
<a href="#">Photo Editing</a> (Creating Media)	<a href="#">Audio Production</a> (Creating Media)	<a href="#">Connecting Computers</a> (Computer Systems and Networks)	<a href="#">Sequencing Sounds</a> (Programming)	<a href="#">Repetition in Shapes</a> (Programming)	<a href="#">Branching Databases</a> (Data and Information)
<a href="#">Desktop Publishing Using Google</a> (Creating Media)	<a href="#">Stop-Frame Animations</a> (Creating Media)	<a href="#">The Internet</a> (Computer Systems and Networks)	<a href="#">Events and Actions in Programming</a> (Programming)	<a href="#">Repetition in Games</a> (Programming)	<a href="#">Data Logging</a> (Data and Information)
Safety and Security			Safety and Security		
Year C			Year D		
Autumn Term	Spring Term	Summer Term	Autumn Term	Spring Term	Summer Term
Battle of Britain	Guardians of the Planet	Ancient Greece	Freedom and Justice	The Mysterious Mayans	Coastal Norfolk
<a href="#">Photo Editing</a> (Creating Media)	<a href="#">Audio Production</a> (Creating Media)	<a href="#">Connecting Computers</a> (Computer Systems and Networks)	<a href="#">Sequencing Sounds</a> (Programming)	<a href="#">Repetition in Shapes</a> (Programming)	<a href="#">Branching Databases</a> (Data and Information)
<a href="#">Desktop Publishing Using Google</a> (Creating Media)	<a href="#">Stop-Frame Animations</a> (Creating Media)	<a href="#">The Internet</a> (Computer Systems and Networks)	<a href="#">Events and Actions in Programming</a> (Programming)	<a href="#">Repetition in Games</a> (Programming)	<a href="#">Data Logging</a> (Data and Information)
Safety and Security			Safety and Security		

# UKS2: Curriculum Overview



UKS2

Year A			Year B		
Autumn Term	Spring Term	Summer Term	Autumn Term	Spring Term	Summer Term
From Stones to Steel	Resourceful Rainforests	Walk like an Egyptian	The Romans	Invaders and Settlers	Navigating Norfolk
<a href="#">Introduction to Vector Graphics</a> (Creating Media)	<a href="#">Video Production</a> (Creating Media)	<a href="#">Systems and Searching</a> (Computer Systems and Networks)	<a href="#">Selection in Physical Computing</a> (Programming)	<a href="#">Variables in Games</a> (Programming)	<a href="#">Flat-file Databases</a> (Data and Information)
<a href="#">3D Modelling</a> (Creating Media)	<a href="#">Webpage Creation</a> (Creating Media)	<a href="#">Communication and Collaboration</a> (Computer Systems and Networks)	<a href="#">Selection in Quizzes</a> (Programming)	<a href="#">Sensing Movement</a> (Programming)	<a href="#">Spreadsheets</a> (Data and Information)
Safety and Security			Safety and Security		
Year C			Year D		
Autumn Term	Spring Term	Summer Term	Autumn Term	Spring Term	Summer Term
Battle of Britain	Guardians of the Planet	Ancient Greece	Freedom and Justice	The Mysterious Mayans	Coastal Norfolk
<a href="#">Introduction to Vector Graphics</a> (Creating Media)	<a href="#">Video Production</a> (Creating Media)	<a href="#">Systems and Searching</a> (Computer Systems and Networks)	<a href="#">Selection in Physical Computing</a> (Programming)	<a href="#">Variables in Games</a> (Programming)	<a href="#">Flat-file Databases</a> (Data and Information)
<a href="#">3D Modelling</a> (Creating Media)	<a href="#">Webpage Creation</a> (Creating Media)	<a href="#">Communication and Collaboration</a> (Computer Systems and Networks)	<a href="#">Selection in Quizzes</a> (Programming)	<a href="#">Sensing Movement</a> (Programming)	<a href="#">Spreadsheets</a> (Data and Information)
Safety and Security			Safety and Security		