

# Monks Coppenhall Planning Units for Computing

Each year group will cover computer science in three blocks per year. Each block will consist of three or four lessons . Key Computer Science concepts and knowledge are covered in the first two terms. In the summer term, each year will complete a short physical computing block which applies the component skills, which they have built up in the preceding blocks.

Each year, a more sophisticated understanding of the coding concepts will be developed. For example, in Year 3 simple count-controlled and forever loops are covered. This will be revisited in Year 4 and nested loops will be introduced. In Year 5, nested loops will be developed further and students will be introduced to conditional loops such as 'if/else' and 'until'. All of these will be consolidated again in Year 6. Each year the units will develop the logical reasoning and computational thinking skills

Each year group will also cover five three/ four week blocks of work covering key elements of **information technology** and **digital literacy** each year.

This ensures they get regular exposure each year to the three areas of the curriculum. Blocks build upon what pupils have learnt previously but applied to a more age appropriate app or technology and develop more complex concepts and knowledge. Each unit sets out the component knowledge needs to tackle more complex computing tasks.

Each year, students will be exposed to the following elements of the computing curriculum in manageable chunks.

Information Technology and Digital Literacy blocks covered each year	Word Processing & Functional Skills	Creating Media,	Data and Information	Computers and Networks	Modelling, Music and Media
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Each half term pupils receive a computing lesson specifically focusing on elements of Education for a Connected World using the Common Sense Media platform. The lesson is often an introduction to issues they will explore in the information technology or digital literacy unit that term

The plan also includes 6 online safety lessons each year, one per half term. These lessons are taken from the Common Sense Media platform , free to access. Links to the 8 themes of Education for a Connected World framework are made at the bottom of the Common Sense Media Lessons. Education for a Connected World was based on the themes of Commonsense Media.

Education for a Connected World Theme	Relevant Common Sense Education Themes
Self Image & Identity	Media Balance & Well-Being
Online Relationships	Relationships & Communication
Online Reputation	Relationships & Communication
Online Bullying	Cyberbullying, Digital Drama & Hate Speech
Managing Online Information	News & Media Literacy
Health, Wellbeing and Lifestyle -	Media Balance & Well-Being
Privacy and Security	Privacy & Security
Copyright and ownership	News & Media Literacy
Commonsense Media lessons have a UK-focused version.	

## Year 1

Year 1						
Autumn			Spring		Summer	
<b>Y1 Computer Science</b>	<b>Sequencing (5)</b> Code Studio A, Lessons 2, 4, 5 & 6		<b>Loops (3)</b> Simple count controlled loops Code Studio A, Lessons 8, 9 & 10		<b>Events (2)</b> <ul style="list-style-type: none"> <li>When arrow key pressed</li> <li>When sprite clicked Code Studio A, Lessons 12, 13</li> </ul>	
<b>Online Safety and DL</b>	<a href="#">Jessie and Friends: Watching Videos (1)</a> <b>EfCW</b> <ul style="list-style-type: none"> <li>Managing online information</li> <li>Self Image and Identity</li> </ul>	<a href="#">Smartie the Penguin (1)</a> <b>EfCW</b> <ul style="list-style-type: none"> <li>Online Relationships</li> <li>Managing Online Information</li> </ul>	<a href="#">Hanni and the magic window (1)</a> <b>EfCW</b> <ul style="list-style-type: none"> <li>Online Relationships</li> <li>Managing Online Information</li> </ul>	<a href="#">Media Balance Is Important (1)</a> <b>EfCW</b> <ul style="list-style-type: none"> <li>Managing online information</li> <li>Self-image and identity</li> <li>Online Bullying</li> <li>Health, well-being and lifestyle</li> </ul>	<a href="#">Safety in My Online Neighbourhood. (1)</a> <b>EfCW</b> <ul style="list-style-type: none"> <li>Managing online information</li> <li>Privacy and Security</li> </ul>	<a href="#">Pause for People (1)</a> <b>EfCW</b> <ul style="list-style-type: none"> <li>Health, well being and lifestyle</li> <li>Self Image and Identity</li> </ul>
<b>IT and DL blocks with physical Computing</b>	<b>Creating media - Audio Visual (3)</b>	<b>Word Processing &amp; Functional Skills - Text and Images (3)</b>	<b>Data and Information - Pictograms (3)</b>	<b>Computer and networks - Tech Around Us (3)</b>	<b>Modelling, Music and Media - Music Technology (3)</b>	<b>Computer Science - Physical Computing (3)</b> Bee-Bots

	Y2					
	Autumn		Spring		Summer	
<b>Computer Science</b>	<b>Sequencing (3)</b> <ul style="list-style-type: none"> <li>Compass directions</li> <li>Debugging</li> </ul> Code Studio Course B: Lessons 3, 4, 5		<b>Loops (3)</b> <ul style="list-style-type: none"> <li>Count controlled</li> </ul> Code Studio Course B: Lessons 7, 8 & 9		<b>Events and Impact of Computing (2)</b> <ul style="list-style-type: none"> <li>When arrow pressed</li> <li>When sprite clicked</li> <li>Increased behaviour blocks</li> </ul> Code Studio Course B: Lessons 12, 13	
<b>Online Safety and DL</b>	<a href="#">Smartie the Penguin (1)</a> <b>Efcw</b> <ul style="list-style-type: none"> <li>Online Relationships</li> <li>Managing Online Information</li> </ul>	<a href="#">Jessie &amp; Friends Sharing Images (1)</a> <b>Efcw</b> <ul style="list-style-type: none"> <li>Online reputation</li> <li>Privacy and security</li> <li>Copyright and Ownership</li> <li>Managing Online Information</li> </ul>	<a href="#">Jessie &amp; Friends Playing Games (1)</a> <b>Efcw</b> <ul style="list-style-type: none"> <li>Online relationships</li> <li>Health, wellbeing and lifestyle</li> <li>Privacy and security</li> <li>Self Image and Identity</li> <li>Online Bullying</li> </ul>	<a href="#">How Technology Makes You Feel (1)</a> <b>Efcw</b> <ul style="list-style-type: none"> <li>Health, wellbeing and lifestyle</li> </ul>	<a href="#">Internet Traffic Lights (1)</a> <b>Efcw</b> <ul style="list-style-type: none"> <li>Health, wellbeing and lifestyle</li> </ul>	<a href="#">Pause and Think Online (1)</a> <b>Efcw</b> <ul style="list-style-type: none"> <li>Online relationships</li> <li>Health, wellbeing and lifestyle</li> </ul>
<b>IT and DL blocks with physical Computing</b>	<b>Word Processing &amp; Functional Skills - Digital Books (3)</b>	<b>Creating media - Digital Photography (3)</b>	<b>Data and Information - Data Handling (2)</b>	<b>Computer and networks - Digital Technology Around Us (3)</b>	<b>Modelling, Music and Media - Digital Art (3)</b>	<b>Computer Science - Physical Computing (3)</b> Bee-Bots

Year 3						
	Autumn		Spring		Summer	
<b>Computer Science</b>	<b>Sequencing (4)</b> <ul style="list-style-type: none"> <li>Forward &amp; backward</li> <li>Turns (degrees)</li> <li>Move &amp; jump</li> <li>Debugging - steps</li> </ul> Code Studio Course C: Lessons 3, 4, 5 & 6		<b>Loops (5)</b> <ul style="list-style-type: none"> <li>Count controlled</li> </ul> Code Studio Course C: Lesson 8, 9, & 10 <b>Events</b> <ul style="list-style-type: none"> <li>When sprite 1 touches sprite 2</li> </ul> Code Studio Course B: Lessons 11 & 12		<b>Events (1)</b> <ul style="list-style-type: none"> <li>Code Studio Course B: Lesson 16 (project)</li> </ul> <b>Physical Computing</b> Micro:bits	
<b>Online Safety and DL</b>	<a href="#">That's Private! (1)</a> <ul style="list-style-type: none"> <li>Privacy and security</li> </ul>	<a href="#">Let's Give Credit! (1)</a> <b>Efcw</b> <ul style="list-style-type: none"> <li>Copyright and ownership</li> </ul>	<a href="#">Device-Free Moments (1)</a> <b>Efcw</b> <ul style="list-style-type: none"> <li>Health, wellbeing and lifestyle</li> </ul>	<a href="#">Digital Trails (1)</a> <b>Efcw</b> <ul style="list-style-type: none"> <li>Privacy and security</li> <li>Online reputation</li> <li>Managing information online</li> </ul>	<a href="#">Putting a STOP to Online Meanness (1)</a> <b>Efcw</b> <ul style="list-style-type: none"> <li>Self-image and identity</li> <li>Online relationships</li> <li>Online reputation</li> <li>Online bullying</li> </ul>	<a href="#">Who Is in Your Online Community? (1)</a> <b>Efcw</b> <ul style="list-style-type: none"> <li>Self-image and identity</li> <li>Online relationships</li> <li>Online reputation</li> <li>Online bullying</li> </ul>
<b>IT and DL blocks with Physical Computing</b>	<b>Word Processing &amp; Functional Skills - Text and Graphics (3)</b>	<b>Creating media - Publishing (3)</b>	<b>Data and Information - Branching Databases (3)</b>	<b>Computer and networks - Computers and the Internet (3)</b>	<b>Modelling, Music and Media - Audio Visual Media (3)</b>	<b>Computer Science - Physical Computing (2)</b> Micro:bits

## Year 4

	Autumn		Spring		Summer	
<b>Computer Science</b>	<p><b>Sequencing and Debugging</b></p> <ul style="list-style-type: none"> <li>Debugging pre-made code Code Studio Course D: Lesson 3 &amp; 5</li> </ul> <p><b>Events</b></p> <ul style="list-style-type: none"> <li>When keys pressed</li> <li>When beats changes</li> <li>After ? measures</li> <li>When touching Code Studio Course D: Lesson 6, 7 &amp; 8</li> </ul> <p><b>(5 lessons)</b></p>		<p><b>Repetition - Loops</b></p> <ul style="list-style-type: none"> <li>Nested loops Code Studio Course D: Lesson 9, &amp; 10</li> </ul> <p><b>Loops and Conditionals</b></p> <ul style="list-style-type: none"> <li>Code Studio Course D: Lesson 11 &amp; 13 <b>(4 lessons)</b></li> </ul>		<p><b>Conditionals -</b></p> <ul style="list-style-type: none"> <li>If/else</li> <li>While</li> <li>Until Code Studio Course D: Lesson 14, 15 &amp; 16 <b>(3 lessons)</b></li> </ul>	
<b>Online Safety and DL</b>	<p><a href="#">Rings of Responsibility (1)</a> <b>Efcw</b></p> <ul style="list-style-type: none"> <li>Online relationships</li> </ul>	<p><a href="#">This is me - Online (1)</a> <b>Efcw</b></p> <ul style="list-style-type: none"> <li>Online relationships</li> <li>Self-image and identity</li> <li>Online Reputation</li> </ul>	<p><a href="#">Our Digital Citizenship Pledge (1)</a> <b>Efcw</b></p> <ul style="list-style-type: none"> <li>Online relationships</li> <li>Self-image and identity</li> <li>Health, well being and lifestyle</li> <li>Copyright and Ownership</li> </ul>	<p><a href="#">The Power of Words (1)</a> <b>Efcw</b></p> <ul style="list-style-type: none"> <li>Online relationships</li> <li>Online bullying</li> </ul>	<p><a href="#">Password powerup (1)</a> <b>Efcw</b></p> <ul style="list-style-type: none"> <li>Privacy and security</li> </ul>	<p><a href="#">Seeing is believing (1)</a> <b>Efcw</b></p> <ul style="list-style-type: none"> <li>Self-image and identity</li> <li>Managing Online Information</li> <li>Copyright and Ownership</li> </ul>
<b>IT and DL blocks with Physical Computing</b>	<b>Word Processing &amp; Functional Skills - Advanced Text and Graphics (3)</b>	<b>Creating Media - Animation (3)</b>	<b>Data and Information - Data Logging (3)</b>	<b>Computer and Networks - Online Images &amp; Photo Editing (3)</b>	<b>Modelling, Music and Media - Vector Graphics (3)</b>	<b>Computer Science - Physical Computing Micro:bits</b>

Year 5						
	Autumn		Spring		Summer	
<b>Computer Science</b>	<b>Sprites and Events</b> Animate sprites Code Studio Course E Lessons 3, 4 & 5  <b>Nested Loops</b> Code Studio Course E: Lessons 6 & 7  <b>(5 lessons)</b>		<b>Functions</b> Code Studio Course E: Lessons 10 & 11  <b>Conditionals</b> Code Studio Course E: Lessons 12 & 13 <b>(4 lessons)</b>		<b>Conditionals and Functions</b> <ul style="list-style-type: none"> <li>If/else</li> <li>While</li> <li>Repeat until</li> </ul> Code Studio Course E: Lesson 14, 15, 16 <b>(3 lessons)</b>	
<b>Online Safety and DL</b>	<a href="#">Private and personal Information (1)</a> <b>EfCW</b> <ul style="list-style-type: none"> <li>Managing online information</li> <li>Privacy and Security</li> </ul>	<a href="#">A Creator's Rights and Responsibilities (1)</a> <b>EfCW</b> <ul style="list-style-type: none"> <li>Self-image and identity</li> <li>Health, wellbeing and lifestyle</li> <li>Copyright and Ownership</li> </ul>	<a href="#">Digital Citizenship (1)</a> <b>EfCW</b> <ul style="list-style-type: none"> <li>Online relationships</li> <li>Health, wellbeing and lifestyle</li> <li>Online Bullying</li> </ul>	<a href="#">Online Tracks (1)</a> <b>EfCW</b> <ul style="list-style-type: none"> <li>Online reputations</li> <li>Managing online information</li> <li>Health, wellbeing and lifestyle</li> </ul>	<a href="#">My Media Choices - (1)</a> <b>EfCW</b> <ul style="list-style-type: none"> <li>Self-image and identity</li> <li>Health, wellbeing and lifestyle</li> </ul>	<a href="#">Keeping game fun and healthy (1)</a> <b>EfCW</b> <ul style="list-style-type: none"> <li>Online relationships</li> <li>Health, wellbeing and lifestyle</li> <li>Online Bullying</li> </ul>
<b>IT and DL blocks with physical Computing</b>	<b>Word Processing &amp; Functional Skills - Presentations (3)</b>	<b>Creating media - Video Editing (3)</b>	<b>Data and Information - Databases (4)</b>	<b>Networks and Information-Systems and Searches (3)</b>	<b>Modelling, Music and Media- Podcasting (3)</b>	<b>Computer Science - Physical Computing</b> Micro:bits

Year 6		
	Autumn	Spring

<p><b>Computer Science</b></p>	<p><b>Sprites and behaviours, events and inputs (3)</b></p> <ul style="list-style-type: none"> <li>Controlling multiple sprites</li> <li>Events</li> <li>Behaviour</li> </ul> <p>Code Studio Course F: Lessons 2, 3 &amp; 4</p>		<p><b>Inputs and variables (5)</b></p> <ul style="list-style-type: none"> <li>Creating and using variables</li> </ul> <p>Code Studio Course F: Lessons 7, 8, 9, 10, &amp; 11</p>		<p><b>Machine learning (3)</b></p> <p>Code Studio Course F: Lessons 12, 13, 14</p>	
<p><b>Online Safety</b></p>	<p><a href="#"><u>You Won't Believe this!</u></a>(1) Efcw</p> <ul style="list-style-type: none"> <li>Health, wellbeing and lifestyle</li> <li>Managing online information</li> <li>Privacy and Security</li> </ul>	<p><a href="#"><u>Reading the News</u></a> (1) Efcw</p> <ul style="list-style-type: none"> <li>Managing online information</li> <li>Health, wellbeing and lifestyle</li> <li>Privacy and Security</li> <li>Copyright and Ownership</li> </ul>	<p><a href="#"><u>Digital Friendship</u></a> (1) Efcw</p> <ul style="list-style-type: none"> <li>Self-image and identity</li> <li>Online relationships</li> <li>Online bullying</li> <li>Online reputation</li> </ul>	<p><a href="#"><u>Cyber bullying</u></a> (1) Efcw</p> <ul style="list-style-type: none"> <li>Online bullying</li> </ul>	<p><a href="#"><u>Beyond Gender Stereotypes</u></a> (1) Efcw</p> <ul style="list-style-type: none"> <li>Self-image and identity</li> <li>Online relationships</li> </ul>	<p><a href="#"><u>Media balance</u></a> (1) Efcw</p> <ul style="list-style-type: none"> <li>Health, wellbeing and lifestyle</li> </ul>
<p><b>DL and IT Blocks plus Physical Computing</b></p>	<p><b>Computer and Networks - Advanced Internet Use (3)</b></p>	<p><b>Creating Media - Website Creation (3)</b></p>	<p><b>Data and Information - Spreadsheets (3)</b></p>	<p><b>Word Processing &amp; Functional Skills - Collaboration &amp; Communication (3)</b></p>	<p><b>Modelling, Music and Media - 3D Modelling (3)</b></p>	<p><b>Computer Science - Physical Computing</b> Micro:bits</p>