

# EYFS Computing @ Litton

Computational Thinking is a set of problem solving skills we can learn away from the computer. When children are older they will start to use their Computational Thinking skills to create computer systems that are part of solutions to problems - but not quite in Early Years. We might use online activities now and then to practise some aspects of Computational Thinking skills, but in EYFS we can learn Computational Thinking without computers. This is called an 'unplugged' approach.

**EYFS Computational Thinking definitions:**

<b>EYFS Computational Thinking Skills</b>	<b>Simple definitions</b>
<b>Tinkering</b>	<b>Playing and exploring</b>
<b>Making</b>	<b>Making things, checking and fixing things</b>
<b>Collaboration</b>	<b>Playing and working collaboratively</b>
<b>Persevering</b>	<b>Not giving up</b>
<b>Logic</b>	<b>Anticipating and explaining is logical reasoning</b>
<b>Pattern</b>	<b>Grouping things, comparing, spotting similarities and differences, working out rules</b>
<b>Abstraction</b>	<b>Naming and labelling, working out what is important, sticking to the main theme, ignoring what is not important, creating a summary</b>
<b>Algorithms and Decomposition</b>	<b>Responding to instructions, ordering things, sequencing things, introducing storylines, working out different ways to do things, breaking problems down into steps</b>

**At Litton Primary, EYFS follow Barefoot Computing:**

<b>Autumn 1</b>	<b>Awesome Autumn</b>
<b>Autumn 2</b>	<b>Winter Warmers</b>
<b>Spring 1</b>	<b>Ships Ahoy</b>
<b>Spring 2</b>	<b>People who helped us</b>
<b>Summer 1</b>	<b>Busy Bodies</b>
<b>Summer 2</b>	<b>Super Space</b>

## What computing looks like in EYFS.

### Computer Science

#### **1. Computational Thinking**

- I can follow simple oral algorithms
- I can spot simple patterns
- I can sequence simple familiar tasks

#### **2. Coding and Programming**

- I can use a mouse, touch screen or appropriate access device to target and select options on screen
- I can input a simple sequence of commands to control a digital device with support (Bee Bot)

#### **Lesson Ideas:**

Creating patterns – barefoot computing

Simon Says

Beebots

### Information Technology

#### **1. Word Processing**

- I can play on a touch screen game and use computers/keyboards/mouse in role play
- I can type letters with increasing confidence using a keyboard and tablet.
- I can dictate short, clear sentences into a digital device.

Lesson ideas: children to have the opportunity to type using a keyboard.

#### **2. Data Handling**

- I can identify a chart
- I can sort physical objects, take a picture and discuss what I have done.
- I can present simple data on a digital device

**Lesson ideas:** Class tally chart on the IWB.

#### **3. Presentation**

I can record my voice over a picture.

- I can create a simple digital collage.
- I can move and resize images with my fingers or mouse

**Lesson ideas:** With TA support, children can annotate their voice on an I-pad over a photograph describing the content.

#### 4. Animation

- I can animate a simple image to speak in role
- I can create a simple animation to tell a story including more than one character.

**Lesson ideas:** With TA support, children can annotate their voice on an I-pad over a photograph describing a story.

#### 5. Video Creation

- I know the difference between a photograph and video
- I can record a short film using the camera
- I can record and play a film
- I can watch films back

**Lesson ideas:** Camera app – children to film each other during play.

#### 6. Photography and Digital Art

- I can take a photograph
- I can take a photograph and use it in an app
- I can use a painting app and explore the paint and brush tools

**Lesson ideas:**

Children use the camera app and photo booth to take photos of themselves and/or their surroundings.

Children use 'paintz' on the I-pad to create digital art.

#### 7. Sound

- I can record sounds with different resources
- I can find ways to change your voice (tube, tin can, shouting to create an echo)
- I can record sounds/voices in storytelling and explanations

**Lesson ideas:**

With TA support, children can annotate their voice on an I-pad over a photograph describing a story.

Chrome lab music maker (free website)

At Litton Primary, we follow 'Project Evolve' from EYFS to year 6 which is an online-safety curriculum taught in 8 Strands.

<b>Reception Project Evolve Can do statements</b>	<b>Self-image and identity</b>	I know that I can say 'no' / 'please stop' / 'I'll tell' / 'I'll ask' to somebody who asks me to do something that makes me feel sad, embarrassed or upset I can give different examples of how to say 'no' / 'please stop' / 'I'll tell' / 'I'll ask' I can explain how this could be better to do in real life or online	
	<b>Online relationship</b>	I can name some ways that members of my family talk to each other and other people using the internet I can name an app, a piece of software or a technology that I use or could use to talk to people I know	
	<b>Online reputation</b>	I know what the word 'information' means I know what 'online' means I understand that I can put information online for others to see	
	<b>Online bullying</b>	Say what being 'unkind online' means to them. Give specific examples/ways that people can be unkind through technology and the internet. Recognise differences between kind and unkind behaviours.	Give examples of unkind behaviours online. Name different emotions that someone may feel in their online experiences. Recognise that being unkind online can make them feel less pleasant emotions (such as angry, upset, worried and sad).
	<b>Managing online information</b>	I can talk about how I can use the internet to find things out. I can identify devices I could use to access information on the internet.	
	<b>Health wellbeing and lifestyle</b>	Tell you the things that they are allowed/not allowed to do when using technology/the internet. Name some things that might make them happy/unhappy/angry/sad when they use technology and the internet Name at least one trusted adult who can help them stay safe when using technology/internet.	Give some examples of the rules they have about using technology. Attempt to say why they are allowed or not allowed to do these things. State what to do if they are worried or unsure about something online.
	<b>Privacy and security</b>	Identify and name examples of their own personal information. Name people they trust and why.	
	<b>Copyright and ownership</b>	Recognise that objects and work can belong to them. Demonstrate how and why they own digital work they have created. Explain why digital work belongs to them.	Understand the benefits of naming my electronic work. Demonstrate ways of naming files to help me find them later.