



St Monica's RC Primary School: Computing Long Term Overview

Computing

Autumn Term

Spring Term

Summer Term

Nursery

The ELG for technology in Development matters has now been removed and so children will be exposed to technology through immersive experiences throughout the year, linked to topics and continuous provision to develop their awareness of technology and its various purposes.

Children will use desktops, ipads and the IWB to play simple games, create pictures and use educational apps throughout the year. Adults will model how to use technology and toys linked to technology through continuous provision throughout the year.

Specific skills/experiences:

- Mini Mash covers the seven areas of learning. Access to this in ongoing as part of continuous provision
- Recording their own learning via the camera for Tapestry. This is ongoing through the year but children are taught how to do this in Autumn term. They are taught that this is to capture their learning but also is a two way communication between home and school: children will be able to see the purpose of technology.
- Using 'Simple City' to explore the theme 'People who Help Us'.
- Recognising different uses of technology e.g. search technologies 'Google it' to find pictures to help us see what Diwali is like for example.
- Songs and videos can be sought through YouTube.
- Autumn: Children will be able to use 'minimash' to support the EAD topic of 'Colours and Mixing' and 'Paint and Natural Art'. They can use 'stamps' on Mini Mash to recreate patterns and link it to autumn leaves.
- Introducing the use of Beebots through the topic 'Marvellous Machines' and linked to the maths topic of positional language.
- Recognising the different uses of technology e.g. if you want to communicate with someone far away, you could use a computer, iPad or phone.
- A washing machine will use electricity and therefore does the job of washing clothes that we would have done manually in the past.
- Sat Navs and using maps to find out where we need to go, as part of the 'Journeys' topic. Scavenger hunt around school for technology and consider why it is used.
- Simple City
- Pattern creation on paint/drawing tools on mini mash linked to Chinese New Year
- Using Ipads to take regular pictures of the growing sunflowers to track progress

Reception

The ELG for technology in Development matters has now been removed and so children will be exposed to technology through immersive experiences throughout the year, linked to topics and continuous provision to develop their awareness of technology and its various purposes.

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Specific Skills/Experiences:

- Selecting pictures with parents to send in to school to build up a family tree/collection of pictures as part of 'Me and My Community'
- Creation of their own pirate maps digitally on mini mash

	<ul style="list-style-type: none"> - Creation of their own 'Starry Night' by Van Gogh - Connecting shapes together to create junk model rockets and name the shapes. - Researching different dinosaurs - using maps to investigate the shapes of different countries and to begin to identify the home nations as part of 'Big Wide World'. - Create a scene from 'Colour Monster Goes to School' using 2 paint a picture in Mini Mash 		
KS1 Cycle A	Unit 1:1 Online Safety and Exploring Purple Mash (4 weeks) Unit 2:5 Effective Searching (3 weeks) Unit 1:4 Lego Builders (3 weeks) Unit 1:9 Technology Outside School (2 weeks)	Unit 1:2 Grouping and Sorting (2 weeks) Unit 2:6 Creating Pictures (5 weeks) Unit 1:8 Spreadsheets (3 weeks)	Unit 1:7 Coding (6 weeks) Unit 2:1 Coding (5 weeks)
KS1 Cycle B	Unit 1:1 Online Safety and Exploring Purple Mash (4 weeks) Unit 1:5 Maze Explorers (3 weeks) Unit 2:4 Questioning (5weeks)	Unit 2:2 Online Safety (3 weeks) Unit 1:6 Animated Story Books (5 weeks) Unit 2:7 Making Music (3 weeks)	Unit 2:3 Spreadsheets (4 weeks) Unit 1:3 Pictograms (3 weeks) Unit 2:8 Presenting Ideas (4 weeks)
LKS2 Cycle A	Coding <ul style="list-style-type: none"> ● Using Flowcharts Unit 3.1, Lesson 1 ● Using Timers Unit 3.1, Lesson 2 ● 'if' statements Unit 4.1, Lesson 2 ● Coordinates Unit 4.1, Lesson 3 ● Code, Test and Debug – Unit 3.1, Lesson 4 ● Design, Code, Test and Debug Unit 4.1, Lesson 1 Unit 3.2- Online safety	Unit 3.3 Spreadsheets Unit 3.4- Touch typing Unit 3.5- Email including email safety	Unit 3.6- branching databases Unit 3.7- Simulations Unit 3.8- Graphing
LKS2 Cycle B	Coding <ul style="list-style-type: none"> ● Using Repeat Unit 3.1, Lesson 3 ● Repeat Until and 'if/else' Statements Unit 4.1, Lesson 4 ● Number Variables Unit 4.1, Lesson 5 ● Design and Make an Interactive scene Unit 3.1, Lesson 5-6 ● Making a Playable game – Unit 4.1, Lesson 6 Unit 4.2 Online Safety	Unit 4.3- Spreadsheets Unit 4.4- Writing for different audiences	Unit 4.5- Logo Unit 4.6- Animation Unit 4.7- Effective Search Unit 4.8- Hardware Investigators Optional Additional Unit (3.9 – Presenting using Slides or Powerpoint)
UKS2 Cycle A	Coding <ul style="list-style-type: none"> ● Coding Efficiently Unit 5.1, Lesson 1 ● Simulating a physical system Unit 5.1, Lesson 2 ● Friction and Functions Unit 5.1, Lesson 4 	Unit 5.3 Spreadsheets Unit 5.4 Databases	Unit 5.5 – Game Creator Unit 5.6 – 3D Modelling Unit 5.7 – Concept Maps

	<ul style="list-style-type: none"> ● Introducing Strings Unit 5.1, Lesson 5 ● Text Variable and Concatenation Unit 5.1, Lesson 6 ● User Input Unit 6.1, Lesson 5 		
UKS2 Cycle B	<p>Unit 5.2 Online Safety</p> <p>Coding</p> <ul style="list-style-type: none"> ● Designing and writing a more complex program Unit 6.1, Lessons 1 & 2 ● Decomposition and Abstraction Unit 5.1, Lesson 3 ● Using Functions Unit 6.1, Lesson 3 ● Flowcharts and control simulations Unit 6.1, Lesson 4 ● Text Adventure Unit 6.1, Lesson 6 <p>Unit 6.2 – Online Safety Unit 6.3 - Spreadsheets</p>	<p>Unit 6.4 Blogging Unit 6.5 Text Adventures</p>	<p>Unit 6.6 Networks Unit 6.7 Quizzing</p> <p>Additional Units: Unit 5.8 Word Processing Unit 6.8 An introduction to binary</p>