



## Curry Mallet CofE VC Primary School

# Computing Curriculum Overview

### Curriculum Lead: Tim Richards

Our curriculum approach to computing reflects our ethos statement 'We live life in all its fullness'. In particular, we are keen for pupils to discover their own passion for computational thinking and learning.

#### **Intent**

For all children to learn, apply, experience and enjoy computing and technology throughout their primary school years. To provide opportunities for children to explore a range of technology that will help to develop their awareness of technology in everyday lives and experience these technologies through a hands-on approach. To ensure that the teaching of Online Safety and Computing is discrete and cross-curricular. To provide opportunities for a range of programmes to be used effectively and to support pupils' transition to secondary school. To equip children with ways to be aware of their own digital footprint in an ever-changing era of technology.

#### **Implementation**

In KS1 and KS2, class teachers deliver units of lessons that have been chosen for each year group by the Computing Lead. These lesson plans are provided by ELim and these have been developed with primary schools. ELim also provide appropriate termly key stage online safety assemblies which are delivered and then if appropriate are developed and explored further, back in class. All children have access to the technology across the school and technology to support their learning.

#### **Impact**

Children enjoying and experiencing technology that they may not have access to in other areas of their lives. Children being able to use and apply technology to develop skills across programming, multimedia and online safety. Children gaining confidence in using a range of technologies and sharing their knowledge and understanding with parents and the wider community.

#### **Planning**

We subscribe to ELim for access to planning documents for each year group, which offers clear knowledge and skills progression across the year and year groups. It covers all 4 key areas of the curriculum including (programming, multimedia, technology in our lives and data handling). Woven within each planning unit is online safety, ELim also provide appropriate termly key stage online safety assemblies, linked to their online safety active bytes knowledge grids.

#### **Knowledge and skills progression through the school**

Computing skills and knowledge will be developed through building on previous levels of understanding on Technology in Our Lives, Multimedia, Data handling, Online safety and Programming.

#### **In KS1 this will involve:**

##### **Problem solving**

- Understand what algorithms are

- Understand how algorithms are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions

### **Programming:**

- Create and debug simple programs

### **Logical Thinking:**

- Use logical reasoning to predict the behaviour of simple programs

### **Online Safety:**

- 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

### **Using IT beyond the school:**

- Recognise common uses of information technology beyond school

### **Creative Content:**

- Use technology purposefully to organise, store and retrieve digital content
- Use technology purposefully to create and manipulate digital content

## **In KS2 knowledge and skills will be further developed:**

### **Problem solving**

- Design, write and debug programs that accomplish specific goals
- Controlling or simulating physical systems
- Solve problems by decomposing them into smaller parts

### **Programming**

- Use sequence, selection and repetition in programs; work with variables.
- Work with various forms of input and output.

### **Logical Thinking**

- Use logical reasoning to explain how some simple algorithms work.
- Use logical reasoning to detect and correct errors in algorithms and programs.
- Understand computer networks including the internet.
- Understand how networks can provide multiple services, such as the world wide web.

### **Online Safety**

- Use technology safely, respectfully and responsibly.
- Recognise acceptable/unacceptable behaviour.
- Know a range of ways to report concerns and inappropriate behaviour. Be discerning in evaluating digital content.
- Understand the opportunities networks offer for communication and collaboration\_

### **Creating Content**

#### Year 3 and Year 4

- Collecting, analysing, evaluating and presenting data and information

- Select, use and combine a variety of software (including internet services) on a range of digital devices. Design and create a range of programs, systems and content that accomplish given goals

### **Searching**

#### Year 3 and Year 4

- Use search technologies effectively
- Appreciate how search results are selected and ranked

### **Recording**

There will be minimal written recording. Each class will have an online safety display to showcase the children's knowledge and understanding linked to the termly online safety assembly. Teachers will assess the children on their increasing knowledge and skills which will inform the support given in their next lesson.

### **Monitoring**

Computing lead to help design the rolling curriculum map and then to monitor to ensure that units are being taught at the correct time. Computing lead to complete learning walks, speak to pupils about their learning and discuss with colleagues what has gone well. Computing Lead to be made available to offer subject knowledge and advice when needed to support teaching staff in their understanding and delivery of the curriculum.

### **Review**

October 2022