

*'Caring, Curious and Confident'*

# Curry Rivel Church of England Primary School



## Curriculum Overview:

*Our curriculum approach to science reflects our ethos statement 'Caring, Curious and Confident' In particular we aim for pupils to develop curiosity in computing as well as providing opportunities to work co-operatively with others and become confident and resourceful learners.*

### 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 every-changing era of technology

### Implementation

We follow the lesson planning devised by eLIM to develop safe, responsible and competent learners. Each class has an afternoon of IT for one half of each term taught by an HLTA. Online Safety is taught by the class teachers using Active Bites lessons from eLIMS, one lesson each half term.

### 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

### Progression in Computing

#### In EYFS:

Children recognise that a range of technology is used in places such as homes and schools. They select and use technology for particular purposes. Children experience a range of technology to support learning in prime and specific areas, building skills to be ready for primary learning.

#### In Key Stage 1

##### Technology in Our Lives

- Start to understand that other people have created the information used.
- Identify benefits of using technology including finding information, creating and communicating.

##### Multimedia

- Use technology to organise and present ideas in different ways and save and open files.
- Use the keyboard on my device to add, delete and space text for others to read.

### **Online Safety**

- Use technology safely and respectfully.
- Keep 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.

### **Data Handling**

- Find out the different ways technology can be used to collect information, including a camera, microscope or sound recorder.
- Make and save a chart or graph using the data collected and talk about the data that is shown and start to understand a branching database.
- Talk about what kind of information could be used to help to investigate a question.

### **Programming**

- Explain the order needed to make something happen and talk about this as an algorithm.
- Program a robot or software to do a particular task.
- Use programming software to make objects move.
- Watch a program execute and spot where it goes wrong and debug it

## **In Lower Key Stage 2:**

### **Technology in Our Lives**

- Think about the reliability of information on the World Wide Web and identify key words to use when searching safely
- Know how to check who owns photos, text and clipart.
- Recognise that websites use different methods to advertise products.

### **Multimedia**

- Use photos, video and sound to create an atmosphere when presenting to different audiences.
- Create, modify and present documents for a particular purpose and use a keyboard confidently and make use of a spellchecker to write and review work.
- Use an appropriate tool to share work and collaborate online.

### **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.

### **Handling Data**

- Collect and organise data in different ways and identify where it could be inaccurate.
- Plan, create and search a database to answer questions.
- Use a data logger to record and share readings.

### **Programming**

- Use logical thinking to solve an open-ended problem by breaking it up into smaller parts.
- Use an efficient procedure to simplify a program.
- Use a variety of tools to create a program recognising errors and debugging.
- Recognise that an algorithm will help to sequence more complex programs.

## **In Upper Key Stage 2:**

### **Technology in Our Lives**

- Describe how information is transported on the Internet.
- Select an appropriate tool to communicate and collaborate online.
- Talk about the way search results are selected and ranked and check the reliability of a website and know that websites can use my data to make money and target their advertising.

### *'Caring, Curious and Confident'*

- Acknowledge the sources of information and know about copywrite.

#### **Multimedia**

- Combine a range of media, considering audience, atmosphere and structure recognising the contribution of each to achieve a particular outcome
- Be digitally discerning when evaluating the effectiveness of their work and the work of others.

#### **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.

#### **Handling Data**

- Plan and select the most effective tool to collect data for an investigation, presenting it in an appropriate way.
- Check the data collected for accuracy and plausibility and interpret the data collected.

#### **Programming**

- Evaluate the effectiveness and efficiency of an algorithm while continuing to test the programming of that algorithm.
- Use a variable and operators to stop a program. and different inputs (including sensors) to control a device or onscreen action and predict what will happen.
- Use logical reasoning to detect and correct errors in algorithms and programs.

#### **Recording**

Work produced is saved in the class folder on Google Drive

#### **Assessment**

Progress is assessed on an on-going basis using the Somerset 'I can' statements for each area of Computing. Self and formative assessment is used by the computing teacher and teaching assistant during whole class or group teaching. Children's confidence and difficulties are observed and used to inform future planning.

#### **Reporting**

The computing teacher maintains a record, indicating pupils that are working beyond or below age-expected attainment.

#### **Monitoring**

The impact of the Computing curriculum is monitored regularly by the Computing subject leader through pupil discussion, samples of work and discussion with teachers and Head Teacher. Systematic monitoring of all threads of Computing informs the subject leader and school development plan.

#### **Review**

September 2021

#### **Originally written and reviewed by**

Jill Slade