# Subject on page

# Computing





## Intent- we aim to:

Provide an engaging, yet challenging computing curriculum that enables children to embrace and utilise new technology.

Children to know what careers computing can lead to and its importance in the wider world.

We want children to become autonomous, independent users of computing technologies, gaining confidence and enjoyment which will be transferable into many careers.

To enable children to use technology safety, appropriately and skilfully throughout their life.

Plan and teach lessons that build on children's prior knowledge and skills.



## Implementation- how do we achieve our aims?

## **Subject Delivery**

We fulfil the statutory requirements for teaching computing as set out in the national curriculum. We utilise expert planning and resources from the National Centre for Computing Education. Computing is taught right from EYFS to Year 6. Year groups 1-6 teach computing for 1 hour each week.

### **Curriculum Resources**

Across the school we use planning from the National Centre for Computing Education. We follow these units and use the resources that go along side. In school we have 30 laptops which are blocked out for each computing lesson ensuring all children have access to a computer. Additionally, we have 15 school IPADS that can be booked out to support the computing curriculum. All classes have 2 class laptops and 5 class iPads.

## **Core Concepts**

Running through our computing curriculum, we have core concepts that we believe are integral in the teaching and learning of computing.

We want our children to build up their computing skills and knowledge in tandem with each other. These core concepts run through the whole computing curriculum and are revisited each year.



Networks Media



Computer Systems



Technology Programming



Safety



Data and information

### **Assessment and Feedback**

Assessment in computing is ongoing and teachers make use of both formative and summative assessments. The learning objective and success criteria are introduced at the beginning of every lesson. At the end of every lesson, pupils are invited to assess how well they feel they have met the learning objective. In addition to that teachers use questioning throughout the lesson to carefully address any misconceptions.

Every unit includes a summative assessment framework in the form of either a multiple-choice quiz (MCQ) or a rubric. All units are designed to cover both skills and concepts from across the computing national curriculum. Units that focus more on conceptual development include an MCQ. Units that focus more on skills development end with a project and include a rubric. Teachers use this information to inform their overall judgements where they give the children a 1(WTS),2(EXS) or 3(GDS.)

## **Cultural Links**

Because most of our pupils are of White British ethnicity, we are keen to develop children's knowledge and understanding of other cultures.

## **Enrichment**

During school trips to the science and media museum children are encouraged to look at and learn about the history of computing and compare the changes. We also encourage children to take part in a wide range of after school clubs. The children can attend Lego animation, where they can use stop motion animation. They then get to present these to the school during an assembly. We also offer Photography club, where the children explore different techniques to take pictures and then edit them. Another club we offer is code club where the children can practice their programming skills.

### Inclusion

We believe that all children should have the opportunity to achieve their highest potential. Each lesson is sequenced so that it builds on the learning from the previous lesson, and where appropriate, activities are scaffolded so that all pupils can succeed and thrive. Scaffolded activities provide pupils with extra resources, such as visual prompts, to reach the same learning goals as the rest of the class. Exploratory tasks foster a deeper understanding of a concept, encouraging pupils to apply their learning in different contexts and make connections with other learning experiences.

### **Enhancement**

Children are encouraged to use their computing skills independently. Pupils are challenges by giving them opportunities to 'figure it out' themselves. We also encourage homework to be completed in a variety of ways; this includes PowerPoints, word documents, 3D drawing programmes and more.