Computing Primary Curriculum Intent

A Whole School Approach to developing Computing education.
"A high-quality computing education equips pupils to use computational thinking and creativity to understand and change the world."

Primary National Curriculum

Rationale

At the Lionheart primaries, it is our role to ensure **knowledge is taught and remembered**. Our Computing curriculum reflects this and is focused to ensure we provide not only the best possible curriculum but the most relevant curriculum to our children. Our spiral Computing curriculum supports this. Each of the themes is revisited regularly (at least once in each year group), and pupils revisit each theme through a new unit that consolidates and **builds on prior learning** within that area of Computing. Furthermore, to support diversity, it is our aim to provide an equitable curriculum to inspire females into the technology industry. A 2020 study by the AnitaB.org Institute found that women make up **28.8%** of the tech workforce. Our aim is to ensure girls feel like they belong in the Computing industry.

Within the Lionheart primaries, we want all of our children to become confident, responsible users of computers and IT, readily equipped to take an active, positive and safe role in the increasingly digital world. To do this, we have developed a Computing curriculum which is: relevant, exciting and challenging while also being cohesive within the wider curriculum. Children will use computers as well as experience "Unplugged" lessons to enhance their knowledge and skills with regards to Computational Thinking.

In recent times, the use of internet and social media has exploded and our young children are growing up in a digital world: it is imperative that we ensure all **children are aware of how to be safe when using technology** and within each year group there are links to online safety.

Vision

We want our curriculum to create skilled and knoweldgebale computational thinkers who can programme, debug, manipulate and use apps to create digital media confidently. Children who are creators and problem solvers- not just consumers of tech. We want our children to be prepared for living in a tech-filled world: to live and work in harmony with technology and to foster a love and passion for using technology. We aim to promote a life-long curiosity and love of Computing. Our curriculum will be one which promotes equality and challenge for all, regardless of ability: in lessons, all children are able to succeed and thrive. Our vision is to cover the ambitious National Curriculum objectives and for this, we use Teach Computing to support our Curriculum design.

How will we teach Computing?

The Teach Computing curriculum has been written by experts to support all pupils. It is split into ten strands which encapsulate the disciplines of Computing. The curriculum is split into four themes (divided into 6 units per year group) which combine the ten strands as shown in the table below:

Primary themes	Computing systems and networks	Programming	Data and information	Creating media
Taxonomy strands	Computer systems Computer networks	Programming Algorithms Design and development	Data and information	Creating media Design and development
	Effective use of tools			
	Impact of technology			
	Safety and security			

Our Computing curriculum supports pupils in the **acquisition of knowledge**, through the use of key concepts, terms, and vocabulary, providing opportunities to build a shared and consistent understanding. We aim to make ideas concrete by bringing abstract concepts to life with real-world, contextual examples and a focus on interdependencies with other curriculum subjects. This can be achieved through the use of unplugged activities, proposing analogies, storytelling around concepts, and finding examples of the concepts in pupils' lives.
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** and adaptaions provide pupils with extra resources, such as visual prompts, to allow all pupils to **reach the same learning goals**.
Exploratory (challenge) tasks foster a **deeper understanding** of a concept, encouraging pupils to apply their learning in different contexts and make connections with other learning experiences.