



## Computing Curriculum Statement

### Intent

At Hockliffe Lower School we believe computing is an area of education that becomes ever more prevalent as time goes on. As technology continues to advance in the world around them, the computing curriculum gives children the skills, experience and confidence they need to engage with both current technologies in their lives while also preparing them with the necessary grounding for exploring and engaging with technologies of the future. It equips children with not only skills and knowledge but a positive attitude and awareness of how to stay safe within their online environment and how to become responsible contributors to the online world.

Our computing curriculum aims to provide children the greatest possible opportunities to develop their computing knowledge and skills throughout their time at Hockliffe Lower School. Individual areas of knowledge and skills have been sequenced by year group to ensure children are working at the appropriate level and that each year their learning builds on what came before. All aspects of our computing curriculum fall into the following four skill areas (*italics for KS2*):

- Programming – understanding algorithms, creating, debugging, *solving problems*
- Creating digital content – word processing, digital art, pictures and photography, video, *data handling*
- E-safety – e-safety rules, respect, privacy, help and support, *responsibility, reporting concerns*
- Using the internet – search engines, *networks, world wide web, communication and collaboration*

In support of our weekly award Meerkat Learner scheme at Hockliffe Lower School we also take opportunities to recognise Meerkat Learner attributes within computing activities (Motivation, Engaged, Enquiring, Resourceful, Knowledgeable, Alert, Thoughtful).

### Implementation

Our computing curriculum has been carefully designed to provide children the greatest possible opportunities to develop their computing knowledge and skills throughout their time at Hockliffe Lower School. Individual areas of knowledge and skills have been sequenced by year group to ensure children are working at the appropriate level and that each year their learning builds on what came before. In this way, knowledge and skills are regularly revisited to ensure children become as fluent in them as possible to allow them to focus on the next steps in their skill development. Topics within computing cover all aspects of the national curriculum yearly with topics working on a two-year cycle due to our vertically grouped classes.

Computing lessons for years 1 to 4 are taught by a specific teacher to take advantage of their expertise in the area. Because of this, at the start of each half term the computing topics of each Key Stage will be shared in a staff meeting to ensure all class teachers are aware of the computing themes, knowledge and skills are being developed in their class for that half term so that they may support and reference them as appropriate.

### Early Years Foundation Stage:

Children in foundation stage are taught computing in accordance with the early years curriculum. Please refer to the EYFS policy.

### Key Stage 1:

Due to our vertically grouped classes, Year 1 and 2 are taught computing in two computing afternoons each half term. This allows a deeper experience as their learning has a chance to develop uninterrupted over two sequential

afternoons. Peer support and learning leaders are used to encourage more confident children to take on a supportive, mentoring role for their peers. Activities within these afternoons are often linked to the topic as this is how we structure our curriculum. Each afternoon is primarily focused on one of the skill areas specified later in this document to enable a deeper focus for their computing skills development.

KS1 learning focuses on the development of specific skills within programmes, for examples using tools with paint, creating simple games using 2DIY and using online programmes such as google maps to explore and learn about the world around us.

These are the computing themes for KS1:

	<b>Autumn</b>	<b>Spring</b>	<b>Summer</b>
<b>Year A</b>	Exploring homes through google maps  The Great Fire of London – paint pictures	Gymnastic videos for self-improvement  E-safety	Turtles – multimedia photography pictures  George’s Marvellous medicine – 2DIY collecting game
<b>Year B</b>	Exploring the seaside using google maps  Fireworks – paint pictures	Fairy Tale Mazes – 2DIY maze game  E-safety	Explorers – programming a journey – j2code  Africa – the big 5 fact file

### Key Stage 2:

Years 3 and 4 are taught in weekly lessons which are structured into half termly topics. Where possible these relate to their topic work.

KS2 learning focuses on building on previous skills, applying these across different programs, becoming responsible and respectful online and coding within programming, including coding set algorithms, creating their own and then problem solving via debugging.

These are the computing themes for KS2:

	<b>Autumn</b>	<b>Spring</b>	<b>Summer</b>
<b>Year A</b>	Superheroes – researching and designing an animal themed hero.  E-safety	Word processing skills – creating content  Red nose digital art  Data Handling	Logo – instruction coding and debugging  Scratch – programming and interactive scene
<b>Year B</b>	E-safety – links  Online searches  Christmas collages – creating and manipulating digital content	Word processing skills – formatting content  Questions and quizzes – scratch	Logo – programming and debugging  Designing and programming a game – 2DIY

### Assessment:

On-going assessments of children’s attainment of computing objectives are made during lessons using questioning, children’s self-assessment and work scrutiny as evidence. The assessment grid used is a direct mirror of the progression grid to ensure assessment shows progression of skills appropriate for their age while also allowing

assessment of skills either below or above their current year group to better highlight areas where further support is needed.

### **Extended Learning for Computing:**

There are many opportunities for children to revise, extend and apply the knowledge and skills they learn in computing within the wider curriculum. Examples include using word processing skills to present work in other subjects and towards creating the class newspapers each term, using online skills to research and discover new information within specific topics and using digital devices to record learning through photographs or videos. Computing is also used regularly within math, especially within KS2 where children use iPads to practice maths skills such as learning their times tables. Wider opportunities to support children outside of lessons include providing e-safety sessions for parents to support safer online environments for children at home.

### **Health and Safety:**

When working with any online device our children will be taught:

- To follow the school's e-safety rules
- To demonstrate respect towards others when online
- To keep personal information private
- To know where to find help and support about online issues, including how to report any concerns
- To be responsible members of the online world

Additionally, children will be taught:

- To use equipment safely and respectfully

### **Impact**

We aim for all our children that leave Hockliffe Lower School to:

- Be curious about the potential of different programs
- Be enthused to create their own digital content
- Use their experiences to use digital devices appropriately
- Think creatively about problem solving within computing
- Practice skills from other areas of learning within computing
- Be able to apply their computing skills in other areas of learning
- Work with others, treating them with respect and listening to their ideas
- Be respectful towards their online environment
- Be responsible for their own and others behaviour online
- Be confident in knowing how to seek help concerning e-safety issues