# Computing

## Intent

In an environment which is increasingly shaped by technology, at Park Hall Infant and Junior Schools we intend to develop safe, responsible, independent, creative and confident users of ICT. We will provide all pupils with opportunities to develop their computing skills, which will enable them to flourish, initially, in the next phase of their learning but also to be able to participate effectively and safely in this digital world.

The teaching of Computing includes:

- Computer science – children are taught the principles of information and computation, how digital systems work, and how to put this knowledge to use through programming.
- Information technology – children use information technology to create programs, systems and a range of content.
- Digital literacy – children use, and express themselves and develop their ideas through, information and communication technology – at a level suitable for the future workplace and as active participants in a digital world. *(National Curriculum)*

We also intend to use ICT as a tool for enriching learning opportunities across the curriculum; engaging children through the use of a variety of devices, including Chromebooks, iPads and interactive whiteboards.

## Online Safety

As well as the benefits of technology, we are also aware of the risks. This is why we prepare our children to stay safe online. We have an Online Safety Policy that provides guidance about how to use the internet safely. We use Project Evolve to identify areas for teaching and cover the 8 strands as provided by UK Council for Internet Safety's (UKCIS) framework 'Education for a Connected World' with termly lessons throughout EYFS, KS1 and KS2 using lessons and resources from Project Evolve and Purple Mash.

## Implementation

During the academic year, teachers plan in year group teams during planning, preparation and assessment time to consider/plan the following:

- Planned times to use technology across the curriculum, which provide opportunities to develop skills, knowledge and specific vocabulary.
- Children have access to 'Purple Mash' – a creative online space of curriculum focused activities, creative tools, programs and games to support and inspire creative learning. We follow and adapt units of learning to enable children to develop their technological

skills. This also supports our creative curriculum and is online, enabling children to continue their learning at home.

- Progression trackers, which outline knowledge, skills and vocabulary for each year group.

## Impact

Our computing curriculum is high quality, well thought out and planned to demonstrate progression. If children are keeping up with the curriculum, they are deemed to be making good or better progress.

### By the end of KS1, children will –

have become familiar with Google Chromebooks and a variety on Online platforms to help them with their learning in school and at home, such as Purple Mash, Spelling Shed, TTRS and Numbots. They will use technology safely and respectfully, learning about 'Online Safety', specifically keeping personal information private and identifying where to go for help and support when they have concerns about content. They will use technology purposefully to create, organise, store, manipulate and retrieve and begin to use programming software, gaining an understanding of algorithms and their purpose.

### By the end of KS2, children will -

demonstrate excellent understanding of how to use programs on the computers such as Microsoft Word, Excel, PowerPoint etc (or Google versions of them). They will learn about and understand computer networks, including the internet, and the opportunities they offer for communication and collaboration. They will learn about 'Online safety' by covering the 8 strands of Internet Safety. They will learn how to use technology safely, respectfully and responsibly and identify a range of ways to report concern about content and contact. They will also learn how to use programming software to design, write and debug programs and, in doing so, learn how to use sequence, selection, and repetition in programs; work with variables and various forms of input and output; and use logical reasoning to explain how some simple algorithms work. Children will recognise the context of prior leaning and will clearly understand why and how what they are learning will help them in the next stage of their learning.