#### **Computing: Pedagogy**

### Aims of our Computing curriculum

We want our children to become responsible citizens that leave Emmaus ready to take on the world in the 21<sup>st</sup> century.

"A high-quality computing education equips pupils to use computational thinking and creativity to understand and change the world. ... The core of computing is computer science, in which pupils are taught the principles of information and computation, how digital systems work, and how to put this knowledge to use through programming. ... Computing also ensures that pupils become digitally literate — able to 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." (Dept. for Education 2013)

To address these aims, our curriculum is designed around three key concepts identified in the National Curriculum:

- 1. Digital Literacy
- 2. Information Technology
- 3. Computer Science

Some of these strands are broken down even further into other categories which are built upon throughout the key stages. These are:

- Networks and Communication
- Multimedia and Graphic Design
- Data Handling

We also believe it is important to specifically focus on basic skills including how to log on/off, navigate software, use hardware and save and retrieve work to prepare children for the digital world that they will encounter.

# **Online Safety**

A crucial and integral part of Computing is to understand how to stay safe online, including being able to make decisions about digital content and being aware of our digital footprint. We educate children about online safety right throughout school and make use of Google's (2021) 'Be Internet Legends' which empowers children to use the web safely so that they can be confident explores of the online world. We chose this programme to underpin our online safety curriculum as it was designed with support from leading experts, including Parent Zone, Internet Matters and CEOP.

Key concepts covered are:

#### • BE INTERNET SHARP:

- Think Before You Share: Good (and bad) news travels fast online, and children can sometimes find themselves in tricky situations with lasting consequences. But what can they do to prevent this? The answer: understand how to share smartly with those they know and those they don't.
- Every Word Matters: Treat online communication the same as face-to-face communication. If it isn't right to say, it isn't right to post. If in doubt, get guidance on what kind of communication is (and isn't) OK. Personal details about family, friends and yourself should stay private.

- BE INTERNET ALERT: Check That It's For Real: People and situations online aren't always what
  they seem. Internet Legends know how to tell the difference between what's real and what's
  not.
- BE INTERNET SECURE: Protect Your Stuff: Personal privacy and security are as important
  online as they are in the real world. Keeping valuable information safe helps children avoid
  damaging their devices, reputations and relationships.
- BE INTERNET KIND: Respect Each Other: The internet amplifies everything: good things seem
  more exciting, bad things seem much worse and can hurt a lot. A great rule to live by online,
  as well as off, is 'treat others as you would like to be treated yourself'. Children can have a
  positive impact on others and stop bullying in its tracks by refusing to join in.
- BE INTERNET BRAVE: When in Doubt, Discuss: When children come across something they're
  not sure about online, they should feel comfortable talking to a trusted adult. Adults can
  support this by showing they're open to talking, even about difficult or embarrassing things at
  home and in the classroom.

# How can I help my child at home?

Computing is not just about using a computer. It also includes the use of tablets, game consoles, controllable toys, digital cameras and everyday equipment such as a tape recorder or DVD player. Children can be helped to develop their computing skills at home by:

- Talking about the importance of communication and how we communicate in different ways
- Writing a letter to and or video calling a relative
- Video calling a relative
- Drawing a picture on screen using drawing tools
- Using the Internet to research a class topic
- Planning a route with a controllable toy
- Using interactive games
- Playing on an educational App on a tablet

## For more information, please read:

**Dept. for Education** 2013 *Computing programmes of study: key stages* 1 *and* 2 <a href="https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/239033/PRIMARY national curriculum - Computing.pdf">Computing.pdf</a> Accessed 15.06.2021

Google 2021 Be Internet Legends <a href="https://beinternetlegends.withgoogle.com/en\_uk">https://beinternetlegends.withgoogle.com/en\_uk</a> Accessed 15.06.2021