Bentley Heath Primary Academy:
Curriculum Intent:

(Why we teach computing…)

Our changing world is technologically diverse, and increasingly elements of every-day life are moving digital, online or into electronic systems. Computing is no longer a luxury, but an every-day element of life, from the bar codes on shopping, to the technology in our wristwatch.
Simultaneously our world is becoming one of two realities. That of the 'real world,' tangible and real around us, but also a 'virtual world' where our experience through social media, websites and online systems is heavily connected to our real-world realities. We communicate through digital means, explore virtual libraries of film, media, data and files. Many people share their personal lives in a digital 'front-end' through blogs, vlogs and social media.
In 1965 Gordon Moore posited a concept, known as 'Moores Law' that the power of micro-processing will double every year. This law is an old concept now, but it's rationale that computing will continue to grow is a daily reality, with exponential growth of computer science and computing power meaning that technology unheard of a decade ago, is an everyday reality now. It develops daily, and we should assume will continually develop in the future into forms as yet not even dreamt of. Our pupils need to be ready for this.

The advent of smart-devices, such as phones and watches, means that people, including our children, can have access to the internet and the World Wide Web from anywhere at any time. This is a brilliant time to be growing up with technology, as knowledge is quite literally at our fingertips. That said, this also brings inherent risks as our virtual communities are not as safe as sitting in our homes browsing the internet would suggest. Grooming, data-crime, identity theft and cyber-bullying are all risk factors to our children.

It is our intent that pupils leave Bentley Heath with a good grounding in the elements of computing knowledge, understanding and safety that mean they will enter their net phase of life as proficient, discerning, and savvy users who are well prepared to avoid the risks of a digital world whilst making the most of what a technologically diverse future offers them.

Aims of our curriculum:

We want our children to be able to:

- problem solve and write their own programs through writing and debugging algorithms
- use the internet safely and securely both as a tool for communication and research.
- use a variety of computer programs to publish their ideas to illustrate their understanding.
- to create, edit and publish music and film using a variety of computing multimedia.
- know that data can be presented in different ways and manipulated within an evaluation.
- be digital ambassadors – not only knowing how to keep themselves safe online, but also recognise their responsibility to others within their community.
- know the many risks involved in use of the internet, and what to do to protect themselves or how to deal with issues when they arise.
- Recognise the impact of their own 'digital footprint' on potential risks to their reputation and standing in - their community.
- be discerning in the use of the internet, recognising it's risks, and knowing how to protect their digital identity and information.
- use technology efficiently and with awareness of its limitations so as to be proficient and efficient users of technological tools and software.