

## Subject on a Page.



## Computing

*At Kidgate Academy, we acknowledge the importance of computing skills in the modern world. We strive to help our children become competent and enthusiastic programmers, effective problem solvers and responsible users of technology. We achieve this through embedding technology across the curriculum, giving children the opportunity to apply the skills they have learnt.*

### Intent – What do we aim to deliver?

To prepare our learners for the ever-changing digital world by teaching crucial computing skills. We want them to understand how to remain safe and responsible online citizens, through understanding the benefits and risks of being online, and to be able to recognise when to seek help in difficult online situations.

To help children develop their resilience, problem-solving, and critical thinking abilities by giving them opportunities to collect, record, store, present and analyse information in a manner that is useful and can help to solve wider problems.

To give children opportunities to use various devices and teach them to be able to record, capture and edit content such as pictures, music and videos. This will encourage the children to use technology and develop their confidence in the process.

To develop children's understanding of how computing systems and networks operate, by exploring how computers communicate and connect to one another.

To encourage the children to engage in programming by equipping them with the skills of writing, adapting and debugging code - of varying degrees of difficulty - to instruct a computer to perform set tasks.

Computing lessons are taught in weekly discrete lessons. Technology is incorporated to lessons on a daily basis, providing children opportunities to apply skills they have learnt.

### Implementation – How do we aim to deliver it?

Our computing curriculum is separated into five key areas: computing systems and networks, programming, creating media, data handling, and online safety. Pupils revisit the five key areas throughout their time in key stage 1 and key stage 2. Each time a key area is revisited, it is covered with greater complexity. Upon returning to each key area, prior knowledge is utilised so pupils can build on previous foundations, rather than starting again.

Where appropriate, the use of various forms of technology are regularly integrated into lessons across the curriculum which mirrors the universal use of technology in everyday life. This gives the children the opportunity to apply the skills they have been taught in discrete computing sessions, which further embeds the knowledge.

Children are given chances to combine and apply skills and knowledge gained, from a range of the five key areas above, to produce a specific outcome in the skills showcase units.



We use the Teach computing scheme of learning to aid the delivery of our computing curriculum. Through this scheme, children are given the chance to use a variety of software and hardware in computing lessons. They are also given opportunities to engage in 'unplugged' lessons, where children deepen their knowledge on computing concepts.

### Impact – How will we know when we have delivered it?

Children are able to write code of increasing difficulty and are able to debug errors, mostly independently.

Children recognise safe and acceptable use of technology and continue to be responsible digital citizens, both inside and outside of school.

Children can independently and confidently create media for a range of purposes.

Children are able to interpret, record and present data accurately using information technology.