Rationale for Computing

At Greengate Lane Academy we follow the National Centre for Computing Scheme of Learning for computing. There are six strands of computing that underpin the curriculum. The curriculum builds on the children's knowledge and skills in each of the six stands over their time at Greengate Lane Academy. The six strands are:

- Computing systems and networks
- Creating Media
- Programming A
- Data and information
- Creating media
- Programming B

The National Centre for Computing Scheme of Learning for computing is designed to enable children to make, refine and critically evaluate digital content and give them the necessary tools to become active participants in today's ever-changing digital world. This curriculum provides children with opportunities to create and explore their own programs and digital software in a safe and responsible manner. Children will understand that computer networks provide multiple services and opportunities for communication and collaboration and recognise how to access online content safely and respectfully. Throughout this curriculum we aim for each child to be encouraged to become a curious, competent, confident, and creative users of information and communication technology.

The curriculum fulfils the requirements of the National Curriculum for England. This course of study seeks to show how computing shapes and changes both the past and future of our national culture and achievements. It focuses on children understanding what a computer is and they are used to share information and data. Children will learn the different types of software and their purposes. They will become confident in using digital content in a variety of different combinations, including that of different types of

programs. Each child will be able to use a multitude of multimedia including audio, text, images, and video to create information through which they can communicate and express themselves creatively. Pupils will be made aware of and explore a variety of creative digital careers that exist including graphic designer, game designer, musician, artist, filmmaker, and animator.

Content is determined by subject leaders to enable our progression of knowledge and skills model. Teachers are responsible for retrieval practice for previously learned content and planning visits to local places of cultural interest to embed children's learning.

Mastery and depth of learning is defined as:

• Mastery (end of milestone): pupils meeting or mastering the end of key stage expectations and progress over time.

• Depth (day to day/across a year): pupils understanding lesson content well enough and being able to use and/or apply knowledge/skills

Nothing is learned unless it rests in long-term memories