

Computing

At **Green Gates Academy** we provide a high-quality computing education that equips pupils to use computational thinking and creativity to understand and change the world. Computing has deep links with mathematics, science, design, and technology, and provides insights into both natural and artificial systems.

Intent

Our aim at Green Gates is for every child at **Green Gates Academy** a high-quality computing education equips pupils to use computational thinking and creativity to understand and change the world. Computing has deep links with mathematics, science, and design and technology, and provides insights into both natural and artificial systems. 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. Building on this knowledge and understanding, pupils are equipped to use information technology to create programs, systems, and a range of content. 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. Allowing all children to **“Strive, Achieve and Believe”** to be the best that they can be. It is our aim to create strong cross curricular links with other subjects, such as Mathematics, Science, Computing, and Art. We want computing to prepare our children, to give them the opportunities, responsibilities, and experiences they need to be successful in later life. This curriculum is supported through access to a **wide range of vocabulary** being introduced through subject specific Tier 3 vocabulary, through high-quality texts which are relevant to computing.

Implementation

- A well thought out, whole school, yearly overview of the Art and Design curriculum which allows for progression across year groups in all areas of the curriculum. Art and Design is an integral part of the school curriculum and is embedded into the planning and may be taught discretely or as part of a wider topic. Teaching and learning time is managed effectively to allow children to work on sustained pieces of work. Each year group will participate in one art and design project per term that will be thematically and subject linked where possible and appropriate. These are documented on our curriculum maps.
- Well planned and resourced experiences/projects providing children with a hands-on and enriching experience.
- A range of skills being taught ensuring that children are aware of health and safety issues related to the tasks undertaken.
- Teachers being given ownership and flexibility to plan for art and design; with one lesson allocated per week to allow the time needed for the children to be critical, inventive, and reflective on their work.
- Each experience/project from Year 1 to Year 6 addressing the principles of designing, making, and evaluating and incorporating relevant technical knowledge and understanding in relevant contexts.
- Encouraging pupils to use different media and materials to express their own ideas.

- Allowing pupils to make plans and construct with a purpose in mind using a variety of resources.
- Allowing pupils to select appropriate resources for a product and adapt their work where necessary.
- Subject coordinator to support teachers effectively through robust QA systems, effective CPD for staff and modelling good practice.
- All pupil work will be stored digitally on their Class Notebook, iPad, or individual pupil areas on the network, dependent upon the unit of work.
- A key part of implementing our computing curriculum is to ensure that safety of our pupils is paramount. We take online safety very seriously and we aim to give children the necessary skills to keep themselves safe online. Children have a right to enjoy childhood online, to access safe online spaces and to benefit from all the opportunities that a connected world can bring them, appropriate to their age and stage.
- We aim to build online resilience using our E-safety sessions in Computing lessons and PSHE lessons. The framework aims to support and broaden the provision of online safety education, so that it is empowering, builds resilience and effects positive culture change. The objectives promote the development of safe and appropriate long-term behaviours, and support educators in shaping the culture within their setting and beyond.

Impact

- Children will have clear enjoyment and confidence in computing that they will then apply to other areas of the curriculum and allow them to take on further learning in their next steps and preparation for secondary school.
- Pupil's skills and knowledge are assessed ongoingly by the class teacher, throughout lessons and a summative assessment is completed termly. This informs the computing coordinator of any further areas for curriculum development, pupil support and/or training requirements for staff.
- Pupils speak confidently about what they have completed and in what they have learned. computing.
- Pupils make good or better progress, relevant to their individual needs, judged through assessment for learning, pupil workbooks and pupil outcomes.
- Are inspired by the computing curriculum and want to learn more. Their enquiry skills are improved as is their inquisitiveness about the world around them.
- Show the progression in their skills, knowledge and understanding in the work in their books.
- Can discuss the learning and remember what they have learnt.
- Can use technical vocabulary with accuracy.