

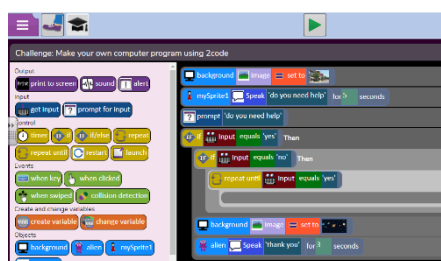


Our Computing Curriculum

Our Computing Intent

At Brighstone, we believe that pupils need to be masters of technology as it is an essential part of their modern lives. We want to develop 'thinkers of the future' through a modern, ambitious and relevant education in computing. We want to equip pupils to use computational thinking and creativity that will enable them to become active participants in the digital world. Children need to understand new technologies and how they affect their lives in a wide variety of different contexts.

Computing is embedded across the whole curriculum where possible, and our aim is, by the end of Year 6, pupils will be able to select the most appropriate tool to complete the task.



Coding in Year 5

Our Computing Implementation

In Foundation Stage, there is not a specific Early Learning Goal for computing, so Barefoot Computing is used to introduce computing skills by threading it through other curriculum areas, such as Maths.

We use Teach Computing as a cohesive scheme of work addressing the statutory aspects of the National Curriculum. Computing is branched into four aspects: Computing Systems and Networks; Programming; Data and Information; and Creating Media, so that our pupils are set a relevant, challenging continuum of age-related skills and knowledge for their own year groups.

In addition, computers are used to support the wider curriculum through software that enriches the curriculum, or the internet, which can be used to research topics.

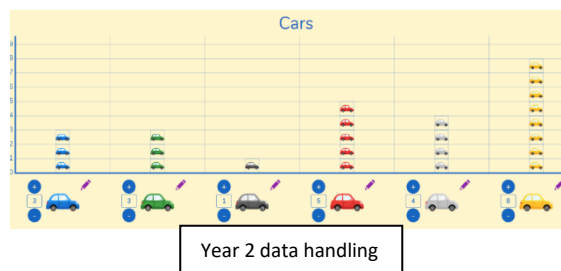
Our Computing Intended Impact

Our Computing curriculum is high quality, well thought out, and planned to demonstrate progression, and build on and embed current skills. We focus on progression of knowledge and skills in the different computational components.

At the end of KS1, children should be able to:

- understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions;
- create and debug simple programs;
- use logical reasoning to predict the behaviour of simple programs;

- use technology purposefully to create, organise, store, manipulate and retrieve digital content;
- recognise common uses of information technology beyond school;
- use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.



At the end of KS2 children should be able to:

- design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts;
 - use sequence, selection, and repetition in programs; work with variables and various forms of input and output;
 - use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs;
 - understand computer networks including the internet; how they can provide multiple services, such as the world wide web, and the opportunities they offer for communication and collaboration;
 - use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content;
- select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information;
- use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.

We will measure the impact of our curriculum through the following methods:

- Pupil discussions and interviewing the pupils about their learning (pupil voice);
- Opportunities for dialogue between teachers;
- Photo evidence and images of the pupils' practical learning which is uploaded to Tapestry;
- Reflecting on standards achieved against the planned outcomes;
- Summative assessment quizzes and tasks at the end of each unit;
- Learning walks and reflective staff feedback (teacher voice);
- Dedicated Computing leadership time;
- Monitoring of children's work.

