# Computing Statement of Intent

All pupils at Howbridge Church of England Junior School have the right to have rich, deep learning experiences that balance all the aspects of computing.

We believe that 'computational thinking' is a skill that is strengthened through the development of skills, experiences and acquired knowledge that is built upon year on year. We believe that pupils learn best when they see a purpose to their learning and can relate what they are learning to previous experiences and knowledge.

A high quality, well delivered and purposeful education allows pupils to be creative and take risks in their learning. Computing has strong cross curricular links with mathematics, science and technology and as modern learners we are able to delve much deeper into these areas through new and emerging technologies and applying acquired knowledge to make our own discoveries.

Competence in coding, logic, algorithms and data representation is not only crucial in many future careers, it also has a variety of practical and inventive purposes including the application of ideas within other subjects. Coding is an ability that can improve the way we approach challenges and at its core is about problem solving, thinking logically and breaking down a problem into manageable steps to find an eventual solution.

The ability to communicate ideas by using a variety of applications and a range of technologies throughout the curriculum, including, desktop computers, iPads and interactive whiteboards. Howbridge also operates a 3D printer in school where pupils are able to apply their own creativity and ingenuity to developing complex three-dimensional models or designing and building an object that solves a problem. 3D printing at Howbridge brings what was simply an idea to life and shows pupils the role computer science plays in the development and creation of physical objects and the connected nature of devices.

A thorough and age appropriate e-safety curriculum is delivered to all pupils at Howbridge to teach children how to stay safe when using computing technology in school or at home.

This learning is delivered throughout each new computing topic and is woven through the curriculum. This is to ensure that children are given constant teaching of the importance of remaining safe online. Each half term a new topic is covered which is appropriate to the children. Our updated curriculum follows a tailor made spiralled curriculum to ensure that each computing topic is relevant.

In addition, each year children are asked to read and sign an Acceptable Use Agreement for using computing equipment in school, which has a strong focus on keeping children safe online. Throughout the year assemblies take place on new and important e-safety topics so children and adults can stay up to date with new e-safety risks and concerns.

The toolkit is based on the Project Evolve framework, that covers knowledge, skills, behaviours and attitudes across eight strands of our online lives which include:

1. Self-Image and Identity.
2. Online Relationships.
3. Online reputation.
4. Online bullying.
5. Managing online information.
6. Health, well-being and lifestyle.

7. Privacy and security.
8. Copyright and ownership.

These outcomes or competencies are mapped to age and are progressive. Our E-Safety curriculum helps stimulate discussion with children as they develop their use of online technology. At the end of each unit students complete e-safety quizzes with the aim of assessing understanding and addressing misconceptions.

**Implementation**

We feel the majority of computing should be embedded across the curriculum. All classes are timetabled to a session in the computing suite each week with iPads also available as an ad hoc bookable resource. Lessons take into account the infrastructure we have in school and through following the Mr P scheme we keep up to date with new and emerging Apps and technologies.

Lessons in our scheme are aimed at being progressive with a strong focus on supporting teachers and pupils in tinkering with Apps at the beginning of each unit, giving them the opportunity to experiment and familiarise themselves with the different elements and tools before applying them to the curriculum.

In addition to discrete computing lessons where children focus on curriculum skills of information technology, digital literacy and computer science, children are given the opportunity to focus on more specific units in the computer suite.

Children's progress will be monitored by Google classroom giving a visual representation of what they understand. This tool is especially beneficial at the end of e-safety lessons where misconceptions can be addressed immediately.

**Impact**

**PUPIL VOICE** Through discussion and feedback, children should talk enthusiastically and confidently about their computing lessons and speak about how they love learning on the computer. Children across the school should articulate well about the potential risks of being online, and can talk about ways to keep safe. Teachers should grow in their confidence in teaching computing

**EVIDENCE IN KNOWLEDGE** Pupils know how and why technology is used in the outside world and the reason they are learning specific skills. They know about different ways that computers can be used and their skills can be applied to other areas.

**EVIDENCE IN SKILLS** Pupils use acquired vocabulary in computing, including coding, lessons. They have the skills to use technology independently.

**BREADTH AND DEPTH** Teachers plan a range of opportunities to use computer technology, inside and outside school.