Computing Curriculum POLICY
October 2021

Date approved by the 'D and P' Committee   ………………………….
Signed by Chair of Governors   …..……………………..
Signed by Head Teacher   ………………………….
Date of next review   October 2021

ANNUALLY

The development of computing and technology is rapidly changing at home and in the community. Its impact on the lives of individuals continues to grow and it is essential that our pupils can take advantage of its opportunities and understand its effects. Therefore, it is important that pupils in our school gain the appropriate skills, knowledge and understanding to have the confidence and capability to use computing technology throughout their lives.
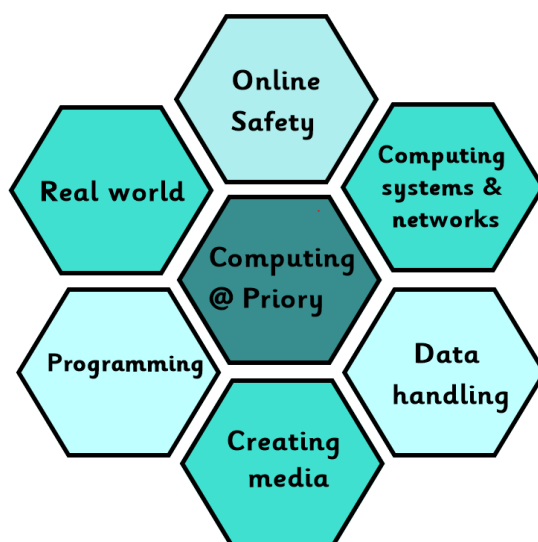
The National Curriculum requires computing and technology to be used in all subjects where appropriate. Computing has deep links with mathematics, science, and design and technology, and provides insights into both natural and artificial systems. The core of computing is computer science, in which pupils 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
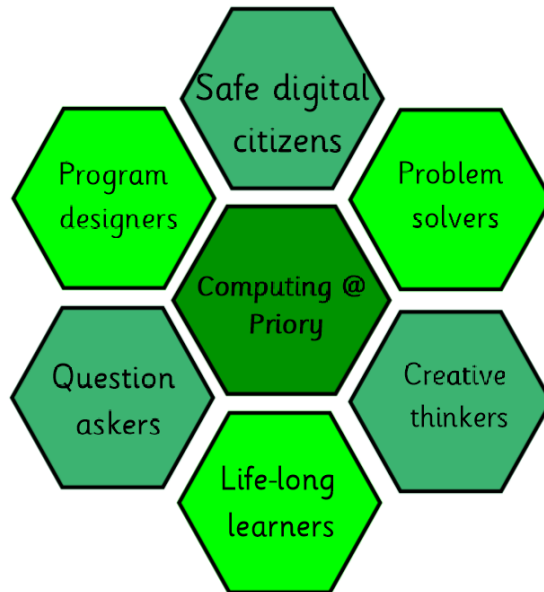
Aims and Intent:

Computing Intent Statement:

The Computing Curriculum at Priory enables pupils to develop computational thinking and creativity, which can be used to understand and change the world. Pupils are taught the principles of computer science, and how this can be used to become digitally literate citizens. Our children will be taught to use technology responsibly and carefully, being mindful of how their behaviour, words and actions can affect others. All pupils are taught how to stay safe online and protect their personal information, so that they can move through life as confident and conscientious participants and creators of the digital world. Our children will be taught Computing in a way that ensures progression of skills and follows a sequence to build on previous learning. Our children will gain experience and skills of a wide range of technology in a way that will enhance their learning opportunities, enabling them to use technology across a range of subjects to be creative and solve problems, ensuring they make progress.

We teach…

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We want our children to be…

Safe digital citizens

Program designers

Problem solvers

Computing @ Priory

Question askers

Creative thinkers

Life-long learners

Implementation:

We follow a broad and balanced Computing curriculum that builds on previous learning and provides both support and challenge for learners. We follow a Computing scheme (Kapow) that ensures the progression of skills and covers all aspects of the Computing curriculum.

All classes will have a scheduled Computing lesson each week. Children's work will be stored in the back of the pupils STEM books, on MS Teams and Seesaw. This is for reference and assessment purposes.

We want to ensure that Computing is embedded in our whole school curriculum and that opportunities for enhancing learning using technology are always taken. For example, we use apps such as 'Green Screen by Do Ink' to give writing a purpose or using our Crumble kits to combine computer programming and electronics.

Cross-curricular Links:

Computing contributes to teaching and learning in all curriculum areas. For example, graphics work links in closely with work in art, and work using databases supports work in mathematics, while the Internet proves very useful for research in topic studies. Computing enables children to present their information and conclusions in the most appropriate way.

English
Computing skills are a major contributor to the teaching of English. Through the development of keyboard skills and the use of computers, children learn how to edit and revise text. They have the opportunity to develop their writing skills by communicating with others. They learn how to improve the presentation of their work. Computing is important to give children the opportunities to publish their written work through video making, giving purpose to their writing and a brilliant way to share with the school, family and community.

Mathematics

Many Computing activities build upon the mathematical skills of the children. Children use computers in mathematics to collect data, make predictions, analyse results, and present information graphically. Through creating programs, they must use problem-solving skills to program and debug the software.

RSHE

Computing makes a contribution to the teaching of RSHE as children learn to work together in a collaborative manner. Through the discussion of moral issues related to electronic communication, children develop a view about the use and misuse of computers, and they also gain a knowledge and understanding of the interdependence of people around the world. This is hugely important in teaching the pupils how to use the internet safely and discuss the issues around cyberbullying (see Online Safety Policy). Pupils are also given opportunities to show pride in their learning, through the use of the Seesaw app (which can be accessed by their parents/guardians).

Impact and assessment:

Our children enjoy and value Computing and know why they are doing things, not just how. Children will understand and appreciate the value of Computing in the context of their personal wellbeing and the technological, creative and cultural industries and their many career opportunities.

Progress in Computing is demonstrated through regularly reviewing and scrutinising children's work to ensure that progression of skills is taking place. Namely through:

- Looking at pupils' work, especially over time as they gain skills and knowledge.
- Observing how they perform in lessons
- Talking to them about what they know.
- Children are encouraged to evaluate their own and others' work in a positive and supportive environment.

The Computing curriculum will contribute to children's personal development in creativity, independence, judgement and self-reflection. This would be seen in them being able to talk confidently about their work, and sharing their work with others. Progress will be shown through outcomes and through the important record of the process leading to them.

Monitoring

- Regular monitoring of Computing helps inform the Curriculum lead and school development plan/school evaluation form. This takes the form of discussions with children, staff and aspects of teaching and planning.

Inclusion

- Children's individual needs will be addressed through provision of resources, learning styles and questioning.
- Computing equipment will be applied for when children have particular special needs.
- Positive use of technology will be promoted by all.

Resources

- Resources are purchased and deployed effectively to meet the requirements of the National Curriculum.
- An inventory of Computing equipment is maintained.
- Additional resources to supplement the cross-curricular use of Computing have been purchased: i-pads, digital cameras, learning apps.

Roles and responsibilities

- All members of staff will work together to ensure the implementation of the Computing policy.
- The subject coordinator and SLT are responsible for monitoring curriculum coverage and the impact of learning and teaching.
- Children have the opportunity to apply for the role of IT technicians and work with the Computing coordinator.

Health and safety

- Equipment is maintained to the meet agreed safety standards.
- With the increasing use of online communication a separate Online Safety Policy is in place.

Review

- The Computing coordinator and leadership team will review the policy annually.