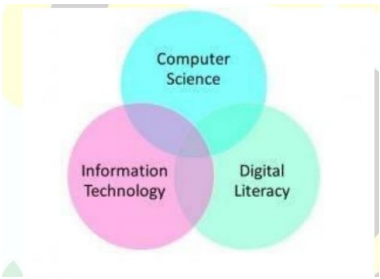
What does 'Computing' look like at Adswood Primary?

1. Curriculum Overview



The Computing Curriculum has been designed around 3 key principles:

Computer Science
Information Technology
Digital Literacy

E-Safety is threaded throughout the above 3 strands to ensure that our children leave school as responsible users of technology.

Computer Science

It is the study of the foundational principles and practices of computation and computational thinking. It is also the application of these concepts in the design and development of computer systems.

In Key Stage one, children will understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions. They will create and debug simple programs and use logical reasoning to predict the behaviour of simple programs.

In Key Stage Two, children will design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts. They will use sequence, selection, and repetition in programs; work with variables and various forms of input and output and use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.

Information Technology

It is the creative and productive use and application of computer systems. It is based on an understanding that technology is everywhere. The children will be able to identify the technology they encounter and have a basic understanding of how it works.

In Key Stage One, children will use technology purposefully to create, organise, store, manipulate and retrieve digital content. They will also recognise common uses of information technology beyond school.

In Key Stage Two, children will 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. They will use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content.

Digital Literacy

This principle develops the ability to use computer systems confidently and effectively. Digitally literate children can communicate and work more efficiently as they are equipped with the skills, knowledge and understanding to actively partake in social, cultural, economic and intellectual conversations. E-safety is an integral part of this principle and we ensure that every child has a deep understanding of it.

In Key Stage One, the children will 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.

In Key Stage Two, they will 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. They will use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.

Digital Literacy

E-Safety is threaded throughout the 3 strands of Computing to ensure that our children leave our school as responsible users of technology. Using Childnet International's SMART rules throughout every year group, we establish a culture of safe internet use.

CLICK CEOP Internet Safety

2. Whole School Overview

Computing Long Term Plan

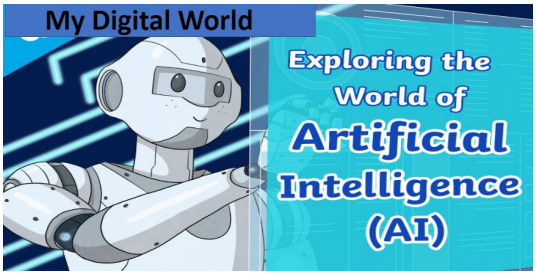
	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 1 & 2	E-safety	Computing Skills	Coding	Robotics	Digital Media	Information Technology
Year 3 & 4	E-safety	Communication	Hardware and Networks	Digital Media	Coding	Robotics
Year 5	E-safety	Communication	Hardware and Networks	Coding	Digital Media	Robotics
Year 6	E-safety	Communication	Hardware and Networks	Coding	Digital Media	Robotics

We follow the Challenge, Progress, Aspire Computing Curriculum.

Each Key Stage has clear progression through each of the 3 strands.

4. Themed Days/Weeks.

Every year in school there is a theme week which takes a different focus. These weeks are excellent opportunities to enable pupils to become digitally literate to ensure that they will become active participants in a digital world.
Each year, we also participate in Safer Internet Day to ensure that the children are aware of online safety and how to report any worries that they have whilst online.



5. Learning beyond the classroom.

We have had exciting VVE opportunities where learning beyond the classroom is brought to life. Examples include:
Working with the Royal Navy to support Coding and Robotics
Using VR Headsets to support History Teaching and Learning

Coding and robotics with the Royal Navy

VVE- 'Why are the ancient Mayans the envy of the world?' workshop
Using VR Headsets

https://drive.google.com/file/d/1pZXuLg07o3z58UDLd-7_yDB3Lkn3PZL6/view?usp=sharing

⇦ Play the link

11.2.2024

3. Learner Voice

Learner voice informs staff that pupils are enjoying their Computing lessons and are engaged. It also provides pupils suggestions for future lesson planning.

"I enjoy using the Microbit Simulator. I can code my name or make a flashing heart!"

"I would like to do more Scratch".

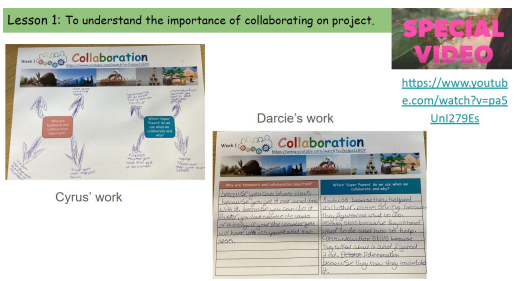
"We have been learning about AI - Artificial Intelligence. People can photoshop and make fake images and fake news."

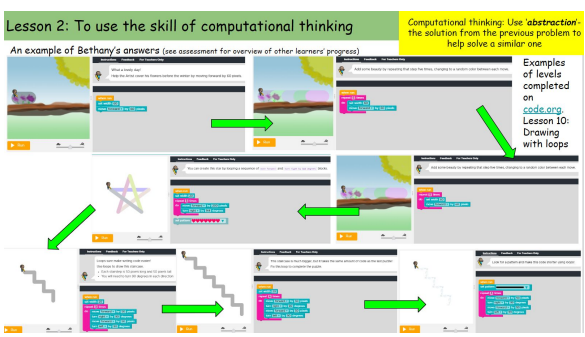
"We learn about E-Safety and then we designed a poster to help keep us safe online."

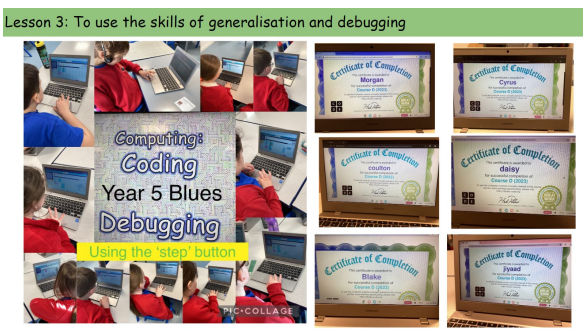
"I Learned how to play Battle Ships on Google Sheets. It was really fun!"

4. Computing E-Books

Every year group has a Computing E-Book which showcases the pupils' learning. It evidences National Curriculum coverage, Key Vocabulary, evidence of work and pupil voice.







6. Assessment

AFL is at the heart of everything we do. The majority of assessment in Computing is delivered through pupil's ongoing work. Children also take part in quizzes at the end of a unit of work. Learners' termly attainment is recorded on Insight and end of year reports.

7. Staff CPD

The subject lead attends regular cluster meetings and keep up-to-date with LA guidelines and new initiatives/resources. Following these meetings, a staff meeting will be arranged where updates/changes will be shared and each year produce a new updated whole school overview.

As part of subject leader development, time is allocated to observe and share inclusive practice across school and in other schools.

8. Adaptive Teaching

As a school, we use the NASEN SENCO guidance. Computing lessons are inclusive to all. Adaptive teaching allows all pupils to access learning and achieve age related expectations.