The Sonar Computer Scientist

Become digitially literate and develop computational thinking and creativity to understand and change the world

Sonar Curriculum

E-Safety

- Use technology safely and respectfully, keeping personal information private
- Identify where to go for help and support when they have concerns

- Use technology safely, respectfully and responsibly
- Recognise acceptable/unacceptable behaviour
- Identify a range of ways to report concerns about content and contact

Information Technology

- Recognise common uses of information technology beyond school

- Understand computer networks, including the internet
- Understand how they can provide multiple services, such as the World Wide Web
- Recognise the opportunities for collaboration and communication

Digital Literacy

- Use search technologies purposely to create, organise, store, manipulate and the retrieve digital content

- You searched technologies effectively and appreciate how results are selected and ranked
- Be discerning in evaluation 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 accomplished giving goals (including collecting, analysing, evaluating and presenting data and information)

Computer Science

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

- Design, write and debug programs that accomplish specific goals, including controlling 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/output
- Using logical reasoning to explain how some simple algorithms work
- Detect and correct errors in algorithms and programs

Teacher Guidance

E-Safety
- Safe & responsible use
- Legal & ethical surfing

Digital Literacy
- Application of knowledge skills and understanding (communication, text, images, video and audio)

Information Technology
- Internet and network use & systems

Computer Science
- Programming, coding & designing

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.

Please note: schools are only required to teach the relevant content by the end of the Key Stage so there is flexibility around coverage.

Juniper