Broadening Horizons

We aim to broaden horizons by introducing software tools that can be used for a wide range of purposes. Many of the tools introduced are free and available for students to use at home. We ensure that students understand how software can be used in the real world, e.g. to plan an event or manage finances. We also introduce students to hardware and software that many students may not have access to outside of school, including Micro:bits, the Adobe suite, Microsoft Office, Chromebooks and PCs.

Careers

We run a series of 'Careers in the Curriculum' weeks in our school. For ICT, this week takes place in December. Students take part in a number of activities to encourage them to think about how what they learn in the classroom can be applied in a number of future careers including: IT Manager, Software Developer, Data Scientist, Web Developer and Information Security Analyst.

Immerse Yourself

Micro:bit Emulator

Microsoft MakeCode for micro:bit is a free, learn-to-code platform where anyone can build games, code devices and mod Minecraft!

Small Basic

Small Basic is a programming language created to help students transition from block-based coding to text-based coding.

Praise and Reward

Our rewards system can be broadly split into four categories: classroom level, subject level, school level and privilege rewards. We'll focus on classroom and subject rewards here - for more information about our rewards schemes, please see our website.

CLASSROOM LEVEL REWARDS

Awarded for: working hard, taking risks and rising to a challenge, making mistakes and learning from them, helping others, and taking pride in the school community.

Rewarded by: praise postcards, positive phone calls to parents/ carers, positive text messages home, and lesson based prizes.

SUBJECT LEVEL REWARDS

Reward scheme: Star of the Week, curriculum awards (Subject/ School Way, participation, working with pride, embracing the whole curriculum), high flyer, extra mile, most improved.

Rewarded by: names displayed on reward boards, certificates, social media posts.

Contact

Nick Lilleker
WPT ICT
Subject Director
nlilleker@wickersley.net

BBC Bitesize Computing & ICT

BBC Bitesize, computing has a range of information and activities linked to our Year 9 curriculum.

Scan the QR code to check it out!

Edition 3
December
2023

COMPUTER SCIENCE

YEAR 9 Curriculum Newsletter

Curriculum Intent

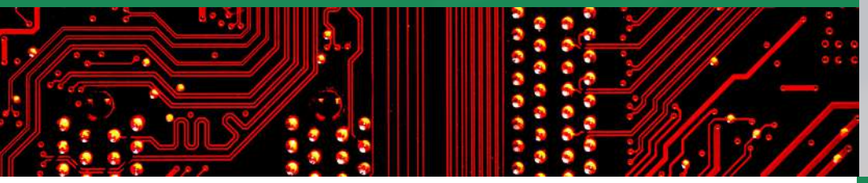
In Computing we aim to provide an engaging, challenging, well sequenced curriculum which is broad and balanced, covering a range of computing and ICT topics. We aim to develop our students into 21st Century Digital Citizens who are able to use digital technology safely and responsibly, and to teach students both how to use technology effectively, with an understanding of how it works.

We aim to engender a love of learning, self-belief and aspiration through 4 key intentions:

- The Removal of Barriers to Learning
- Developing Skills for Learning
- Developing Personal Attributes
- Enriching Student Experiences and Broadening their Horizons

The Computing and IT Department's core purpose at KS3 is to deliver an engaging and challenging curriculum through outstanding teaching and learning. Our aim is for students to develop skills and knowledge in digital technologies and computer science, to prepare them for a future in a world where the use of this technology is fully embodied.

Students are given the opportunity to develop their computer coding and digital technology skills, allowing them to take their studies onto KS4 and beyond, developing skills that can be applied in a range of career paths and industries.



Year 9 Curriculum

In Year 9, Computer Science is delivered via 1 lesson per week as part of the Computer Science and Economics Suite.

Students cover the following topics:

HTML & CSS

Exploring the fundamental technologies behind websites. Students will learn the basic skills required to create a web page using HTML, adding key elements such as titles, headings, images, hyperlinks and tables. Students will also learn the fundamental principles of CSS, using these to style key components of a web page.

Inside a PC

Students will take a PC apart and explore the key components that make up computer systems. Students will cover the role of components such as the CPU, RAM and secondary storage.

Algorithms

In this topic students will learn about algorithms and how to represent them using flowcharts and pseudocode. Key algorithms for searching and sorting data are explored.

Python Programming

Building on the text-based programming skills with small basic in year 8, students will cover key programming constructs such as sequence, selection and iteration using the Python programming language.

Computer Systems

In this topic students will explore computer systems in more detail, developing an understanding of what the CPU does and factors that affect its performance. This topic also covers RAM, ROM, Network Security, systems software and ethical issues around technology.

Algorithms & Programming

Here students will cover a range of topics linked to algorithms and programming. These include computational thinking techniques, data representation and programming fundamentals

Have your say!

At WPT we're always looking for feedback. If you have any thoughts/opinions on this Curriculum Newsletter, its content or the curriculum in general, please scan the QR code to fill out a short feedback form.

Assessment Points

Students are assessed at the end of each topic, roughly once per half term. Assessments are in a variety of formats including short and long answer written questions, multiple choice questions and practical tasks.

The Computing Way

The Computing Way is designed to help students become young subject specialists and has a key focus on the vital skills needed to achieve their full potential in this subject area.