

OUR APPROACH TO: COMPUTING



"Computers themselves, and software yet to be developed, will revolutionise the way we learn."

Steve Jobs

COMPUTING

KS3 SUBJECTS ON A PAGE

OUR AIMS AND INTENTIONS

It is our intention to create strong problem solvers who are willing to get things wrong and then have the confidence to reflect on their mistakes and keep going until they've put it right.

CURRICULUM KNOWLEDGE

KS3 Computing prepares students to safely and competently use a range of computer equipment and software to build, create, design and program. They will develop key skills in computational thinking and creativity to understand and apply the uses of technology.

The units we cover are E-safety and Security, data representation involving binary, hex and images, creative aspects of HTML, CSS and Javascript and extend their knowledge of number bases/logic circuits/gates and Python programming.

SUBJECT SPECIFIC SKILLS

- Develop programing skills
- Problem solving
- Consideration of fitness for purpose
- \blacksquare Safety and security

IMPLEMENTATION

- Lesson by lesson resources are Quality Assured and shared on the M drive.
- Re-call of knowledge is supported using an approach that constantly revisits and tests at the end of each unit to reinforce both the learning and contextual understanding.
- Formal feedback is given at least once per half term and identifies strengths and areas for development and includes a comment on progress after each KAP.
- The computing KS3 unit overview is regularly reviewed to keep it up to date with the latest technology.

COMPUTING IMPLEMENTATION OF THE WIDER MILLTHORPE CURRICULUM:

RESPECTFUL **RESPONSIBLE** READY ■ Engage positively ■ Aiming high in ■ Allow students to access the with problem Computing ATL tools to both understand and solving activities narrow the digital divide. ■ Aspiring to the ■ Providing well 'gold/thinking ■ Students are able to identify planned peer harder challenges' the dangers associated with the in lessons Internet for personal safety and assessment to avoidance of fraud. support the Engaging learning of positively with ■ Producing appropriate others. documents that are fit assessments to ■ Consider online identify next for varied audiences. presence and These include programs. the impact and flowcharts, posters, ■ Using R for consequences promotional material. reflection time of a range of notices, kiosk systems. for personal quizzes, databases etc. actions. improvement.

INTENDED IMPACT

- The KS3 curriculum provides skills for students to become active participants in a digital world.
- Students' progress through each unit in KS3 and are assessed at each stage,
- which is then recorded and assessed against their expected progress.
- Students can effectively reflect on their learning and use feedback to critically review their own work.
- KS4 uptake of Computing continues to be strong.