

# Computing - What's it all about?



## Intent- what are we trying to achieve with our curriculum?

We need to prepare the children for the rapid growth in technology in education, work and life. This will involve teaching specific computing skills as well as general computing learning skills and attitudes that will help them be resilient and flexible learners as technology changes. We intend to develop computational thinking, problem solving and independent learning skills through programming, communication and creative tasks using a range of online tools.

## Implementation- how is our curriculum delivered?

- Each class has minimum 50 minute Computing session weekly as part of PPA cover morning delivered by specialist teacher.
- Use of ICT across the curriculum - iPads and Computer Room Chromebooks used so that learning is enhanced by ICT
- Additional workshops - for example LEGO robotics, animation, film making
- Online safety included in scenarios in relevant PSHE units and assemblies.

## Main areas of learning:

- **Multimedia** – using computers and online tools to communicate, collaborate and create. We learn to combine, text, audio, video and animation creatively and effectively to enhance and communicate our learning.
- **Programming** – developing our computational thinking to program a range of real and on-screen robots. We use LOGO in [j2code](#), [Scratch](#) and LEGO robots.
- **Online** – making the best use of the Internet and online tools. We learn how to search for information more efficiently. We use Google Apps for Education and [j2e.com](#) – both safe environments to explore, create, collaborate and contribute.
- **Data** – how to collect and analyse data in a variety of forms. We learn how to use mindmapping tools, branching databases, how to create graphs and online surveys. We also learn about how networks work – how information travels from computer to computer around the world.
- **Online Safety and Behaviour** – aspects of safety and behaviour that we need to consider in this digital age. These are taught in PSHE as well as in computing. We learn how to keep ourselves and others safe and be good digital citizens. We believe it is everyone's responsibility at school and home to teach children how to be safe and behave well (whether or not they are using technology)
- Typing skills using [typing.com](#)

## Impact- what difference is our curriculum making?

- Positive learning characteristics and Growth Mindset will help children adapt to technology changes.
- Confidence with exploring new tools - because of the changing nature of technology - not specific proficiency with particular tools but being able to learn new tools is most important.
- Able to plan and create programs and algorithms to achieve a variety of tasks, learning key computational thinking skills including sequencing, decomposition, debugging, abstraction and logic.
- A good understanding of online safety and citizenship.
- Typing skills - it will take another year or two to become efficient typists but we have laid the foundations of good technique.
- Experience with a range of creative technologies will equip children to express themselves with these or similar tools by creating posters, presentations, webpages, artwork, animations, music, films, eBooks etc.