

Computing



Intent

Computing teaches us how to manage and encode information.

Golden Threads: Digital literacy (including online safety), computer science, information technology

Digital Literacy— Children are able to use all technology safely, identifying threats to themselves and others.

Computer Science—Children understand how digital technology systems work and can use and program algorithms to achieve specific outcomes.

Information Technology—Children are able to use computers and technology for functional purposes.



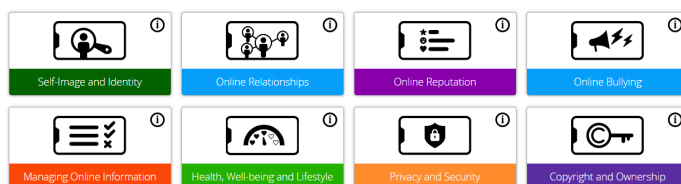
Implementation



Planning: At Westhouses, we use the 'Teach Computing' progression from the National Centre for Computing Education as the main framework for our computing curriculum, but we do supplement this with resources from Micro:bit and barefoot computing. The units are organised to regularly revisit each of the computing strands and provide children with a wide variety of digital skills. Computing is taught weekly for around 45 minutes and work is collated and presented within a year group floorbook, these are accessible to the children and provide opportunities for them to revisit and review prior learning. In EYFS, we follow the barefoot computing blocks, some of these lessons are unplugged.

Online Safety: Online safety is taught throughout the whole year and is delivered within a key stage, bi-weekly assembly. We use the SWGfL Project Evolve materials to support the teaching of these skills, covering eight key strands (as seen below). In an ever increasingly digital world, it is essential that our children understand the benefits, risks and responsibility of using information technology. As a school, we also use '360 Degree Safe' to review our online safety policies and practices to ensure that we recognise both our strengths and areas for development and are able to act upon these. We celebrate 'Safer Internet Day' each year and invite the parents in to work alongside the children and provide opportunities for them to talk to the staff and IT Technician about ways to protect their children whilst they are online.

Resources: Children access and explore our computing curriculum through a variety of hardware: iPads, laptops, beebots, crumbles, Micro:bits and dataloggers. We plan and use these devices across the wider curriculum to ensure children are competent users of them.



Inclusion and additional provision:

Although we expect that the majority of children will have successfully met the national curriculum objectives by the end of the year, we recognise that some children may benefit from further instruction. Interventions will look different for different children. The list below is not exhaustive; you may see:

- ◆ Additional scaffolding or visual cues
- ◆ Peer support
- ◆ Unplugged activities
- ◆ Reading pen
- ◆ Adapted keyboard
- ◆ Additional adult support
- ◆ Touch typing intervention



Impact

Children enjoy computing lessons and are engaging well with the learning and activities provided.

Children develop skills that support them in being respectful, resilient and reflective users of technology.

Children will be able to openly discuss and demonstrate the positive messages of online safety.

Children will produce pieces of work which independently demonstrate the skills and knowledge they have been taught.