

Orchard Key Computing Concepts



At Orchard Primary School, children learn Computing through a concept-based curriculum. Not only does this allow them to gain a deeper understanding beyond solely the topic facts, but concepts or ‘big ideas’ also allow pupils to make connections between their learning, enabling them to make sense of the facts and the world around them.

As part of our Computing curriculum, we involve the use of specific key questions which focus upon factual, conceptual and debatable content. Concepts are returned to throughout the year groups to ensure children have a clear understanding of them, thereby enabling them to be held within their long-term memory.

Please find below are a list of concepts that the children at Orchard Primary School focus upon in Computing and our reasoning behind their choice.

Concept	Why learn about this concept?	Year group studied (though may be referred to within other year groups).
<p>To connect</p>	<p>This concept involves developing an understanding of how to safely connect with others. Due to the advances in technology it is imperative that children know how to keep themselves safe at all times. Children will be taught how to keep themselves safe online throughout their time at Orchard Primary School; this will be taught at the appropriate level for the age group, abilities, and knowledge, of the children.</p> <p>As children have more access to the internet through the use of tablets, laptops, watches etc, it is vital that they understand and can choose websites and games that are appropriate for their age; the children will need to understand why and where to find appropriate games and websites.</p> <p>We also believe that due to the deterioration in children’s mental health and behaviour, children need to learn the importance of limiting this screen time.</p> <p>In addition, children will learn about online bullying and how to behaviour when accessing social media as a tool to communicate; exploring the benefits as well as how to stay safe. We strive to actively prepare the children to be competent in explain the consequences of different actions in relation to keeping safe online. Pupils should leave our school with a good understanding of the need to act within the law and with moral and ethical integrity; this knowledge is vital when thinking about their daily lives and transition into Key Stage3.</p> <p>In Key Stage 1 the children will also be introduced to what technology is and where it can be found. Throughout Key Stage 2, the children will build on this knowledge to explore parts of a computer and the internet and how it works.</p>	<p>Y1-6</p>

To communicate	<p>This concept involves using apps to communicate one’s ideas. Being digitally literate is vital and the knowledge and skills taught throughout their time at Orchard Primary will be applied using different software and/or technology. Everything that the children will create will be in direct response and consideration of their audience.</p> <p>A good understand of reliability of information is vital when using the internet, Children will explore fake news, websites and how social media cannot always be taken as reliable; whilst recognising the benefits of information being readily available on the internet, this is an ever growing problem that children need to be able to recognise.</p> <p>Children will also learn how to check who owns photographs, text and clip art and apply their knowledge of copyright.</p> <p>Pupils will leave Orchard Primary being able to tell you why they have used particular tools and how they have decided to share their work. Everything that they create and use will be evaluated for its quality and reliability. This knowledge and rigor is vital to ensure they become computer literate, preparing them for Key Stage 3 and their adult life.</p>	Y1-6
To collect	<p>This concept involves developing an understanding of databases and their uses. The children need to understand how to collect, understand and evaluate data, in order to prepare them for their daily lives. Technology is all around us and we would like to prepare our children, for this. Throughout their time at Orchard Primary, the children will become more independent to select tools to collect data; they will confidently interpret data and check it for accuracy and plausibility and apply this to real life situations.</p>	Y1-6
To code	<p>This concept involves developing an understanding of instructions, logic and sequences. Children will be taught coding throughout their time at Orchard Primary due to the ever-changing digital world. They will quickly learn that lots of things in our daily lives require programming and code to work; from programming a washing machine at home, to using ‘Beebots’, and Scratch in school, for example. It is vital that the children understand how things work and can apply this knowledge across the curriculum.</p>	Y1-6