

Computing

What is Computing?

Computing is learning about information; how digital systems work and how to program computers to use this knowledge as well as gaining an understanding about the range of ways that computers are used within the world around us.

Child Friendly Definition

Computing is the process of using computer technology to complete a task.

EYFS

The Early Years Foundation Stage Curriculum supports children's understanding of Computing principally through learning and exploration based around the early learning goal of understanding the world. This is delivered through a holistic curriculum which maximises opportunities for meaningful cross-curricular links and learning experiences, as well as promoting the unique child by offering extended periods of play and sustained thinking following children's interests and ideas. We value imagination and creativity and seek to create a sense of enjoyment and fascination in learning through a vibrant continuous indoor and outdoor provision, alongside trips, visits and visitors.

Intent

At John Blow Primary School, computing and the teaching of computing threads through the curriculum. Our main aim is to ensure every single child is aware and confident in the use of a range of technology preparing them for future learning and adulthood.

Computing at John Blow is taught explicitly as well as being a vehicle for other areas of the curriculum for example creating an animation linked to English. Through the use of unplugged teaching, children are exposed to the core vocabulary and concepts of computing, which can then be applied across programming, use of internet as a research tool and the use of computers for recording and presenting work. The aim of the computing curriculum is to provide children with the necessary skills and knowledge to succeed in an ever-developing technological world, so that they may embrace the future with confidence and enthusiasm. E-safety is an essential element of our computing curriculum, ensuring children have a good understanding of how to keep safe when using technology and the potential risks surrounding the use of technology.

At John Blow, our vision of creativity is woven through computing encouraging children to explore problems and learn new skills in a fun and engaging way.

Implementation

Our whole curriculum is shaped by our school vision which aims to enable all children, regardless of background, ability or additional needs, to flourish and become the very best version of themselves they can possibly be. We teach the National Curriculum, supported by a clear objectives and knowledge progression. This ensures that vocabulary, objectives, skills and knowledge are built on year by year and sequenced appropriately to maximise learning for all children.

At John Blow Primary School:

- Computing units are blocked to allow children to focus on developing their knowledge and skills.
- We have developed a progression of objectives, within each year group, which enables pupils to build on and develop their skills each year. This is supported with specific vocabulary for each topic.
- In order to support children in their ability to know more and remember more, there are regular opportunities to review the learning that has taken place in previous year groups as well as previous lessons.
- To support teaching, staff access a range of resources and planning including Kapow Primary computing, Scratch and Turtle Academy.
- Medium term planning for units will cover: previous learning and objective and highlight links with the National Curriculum.
- Teachers use Assessment for Learning at different points in each lesson to ensure misconceptions are highlighted and addressed.
- Effective modelling by teachers ensures that children are able to achieve their learning intentions, with misconceptions addressed within it.
- Cross-curricular links are planned for.
- Our Assessment Tracker (EAZMAG) allows us to use data to inform future practice.

Impact

Sustained learning and transferrable Computing skills.






We aim that by the end of KS2 all of our children have made considerable progress from their starting points in EYFS.







Progressive planning across the school enables children to become confident and safe users of technology. By the time they reach upper Key Stage 2, children have experienced a range of computing activities and have a good understanding of the application of technology.

Children are given opportunities to apply their knowledge and skills in computing across other areas of the curriculum; this shows consolidation of skills, progression and a more comprehensive understanding of computing processes. We hope that as children move on from us to further their education and learning that their skills and knowledge of computing will support them to take advantage of using technology to support them as they continue to grow and develop.

What is Greater Depth at John Blow Primary School?

Greater depth in computing at JBPS refers to a comprehensive and profound understanding of computational concepts, techniques, and applications. It goes beyond surface-level knowledge, enabling individuals to solve complex problems, innovate with new technologies, and create efficient, effective solutions. This depth encompasses mastery of algorithms, programming languages, system design, and an awareness of current and emerging trends in the field. Achieving greater depth involves continuous learning, critical thinking, and practical experience, allowing one to address advanced challenges and contribute significantly to the field of computing.

Computing	Autumn	Spring	Summer
<p>Year 1</p> <p>Focus</p>	<p>Improving mouse skills</p> 	<p>E-Safety</p> 	<p>Programming</p> 
<p>Year 2</p> <p>Focus</p>	<p>E-Safety</p> <p>Computer systems and networks</p> 	<p>Programming</p> 	<p>Word Processing</p> 
<p>Year 3/4 Cycle A</p>	<p>E-Safety</p>	<p>Programming</p>	<p>Creating Media</p>

	<p>Computing Systems and Networks</p> 		
<p>Year 3/4 Cycle B</p>	<p>E-Safety</p> 	<p>Computing Systems and Networks: Collaborative Learning</p> 	<p>Data Handling</p> 
<p>Y5</p>	<p>E-Safety</p>	<p>Search Engines</p>	<p>Programming</p>



Y6

E-Safety

Computing systems and network



Programming



Data Handling

