

# Computing

At Regent Farm we want our children to understand the potential of technology and start to build computing skills for the future. Computing has the power to give us experiences and connections, helping to unite us with the wider world. We recognise that pupils are living in a rapidly changing world, in which ICT is playing an ever-increasing role. We aim, therefore, to equip children with the skills to adapt to new technology and to give them confidence to use ICT to further their learning and to assist them in everyday life.

We want them to become digital creators, using technology to support other areas of their work and lives, and also to understand the responsibilities of being digital consumers on their time, relationships and wellbeing. We aim for children to become “computational thinkers”, tackling complex problems, making mistakes and learning from them.

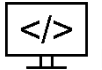


## Computing Strands



### Computer Systems and Networks

*Identifying hardware and using software, while exploring how computers communicate and connect to one another.*



### Programming

*Understanding that a computer operates on algorithms, and learning how to write, adapt and debug code to instruct a computer to perform set tasks.*



### Creating Media

*Learning how to use various devices — record, capture and edit content such as documents, videos, music, pictures and photographs.*



### Data Handling

*Ensuring that information is collected, recorded, stored, presented and analysed in a manner that is useful and can help to solve problems.*



### Online Safety

*Understanding the benefits and risks of being online — how to remain safe, keep personal information secure and recognising when to seek help in difficult situations.*

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
<b>Early Years</b>	Children in EYFS are given experiences to explore and play with technology within the learning environment. They are given opportunities to use simple technology such as electronic toys, ipads and beebots. Children will begin to learn to use a computer looking at the keyboard and mouse. We hope, by having the opportunity to develop computing skills at an early age, children will foster a healthy interest and confidence in technology.					
<b>Year 1</b>	Using a computer	Improving mouse skills	Word processing	Coding Beebots	Internet Searches	Lego Coding
<b>Year 2</b>	Computer systems	Data Handling	Microbits/ Code.org	Lego Coding	Word Processing	Book Creator
<b>Year 3</b>	Journey Inside a Computer	Word Processing	Lego Coding	Microbits/ Code.org	Video Trailers	Investigating Weather?
<b>Year 4</b>	Lego Coding	Code.Org	Search Engines	Email	Using Excel	Book Creator

**Online Safety lessons will take place in all classes every half term – see year group overviews for details.**



## Support and Challenge



- Activities involve group or paired working with roles for each member which encourages peer learning.
- Tasks are structured into smaller steps that build toward achieving the overall objective.
- Lessons have differentiated activities as well as a number of Extension/Enrichment ideas allowing for children to further understanding, or deepen their knowledge.
- Pre teaching may be used to help support children and understand new vocabulary or equipment.
- Specialist teaching through GEM Education.