Intent:

At Eastfield we follow the Enquire Learning Trust Computing Curriculum. We aim to deliver a high quality Computing curriculum that will help our children to build their computational thinking and creativity to understand and change the world.

As part of Enquire Learning Trust, we believe that it is vital for all our pupils to learn from and about Computing and Technology, so that they can understand the world around them. Through teaching our computing curriculum, we aim to equip our children to participate in a rapidly changing world where work and leisure activities are increasingly transformed by technology. It is our intention to enable children to find, explore, analyse, exchange and present information as well as having the skills to manipulate, develop and interpret different forms of technology in an ever-changing world.

In such a fast-moving curriculum, we are constantly looking at new ways of delivering relevant and exciting activities, while still delivering the fundamental skills needed for computing. Using technology safely and responsibly is a main priority and ensuring all pupils are able to use the internet and equipment appropriately is of paramount importance. We encourage our pupils to make links across the curriculum, the world and our local community, to reflect on their own experiences, which are designed in our curriculum, allowing horizontal and vertical links with previous year groups.

The core of computing is computer science, in which pupils are taught the principles of information and computation, how digital systems work, and how to put this knowledge to use through programming. Building on this knowledge and understanding, pupils are equipped to use information technology to create programs, systems and a range of content. Computing also ensures that pupils become digitally literate – able to use, and express themselves and develop their ideas through, information and communication technology – at a level suitable for the future workplace and as active participants in a digital world.

Our ambitious computing curriculum is now structured in 3 areas that allow all pupils from EY to year 6 to progress through different categories of knowledge. These are:

Digital Literacy	Information Technology	Computer Science
(Mechanics, searching/selecting information and E-safety)	(Digital Artefacts and computing contexts)	(Algorithms, programming, data and systems)

Each area of the curriculum gives pupils time to practice and rehearse the knowledge needed to be proficient at computing and be ready for the next age of learning.

We ensure children gain;

Knowledge of:
- Algorithms

Skills to:
- Create and debug programs

- How to use sequence, selection, and repetition in programs; work with variables and various forms of input and output
- Logical reasoning to predict an explain how algorithms work.
- Common uses of IT
- How to use technology safely and responsibly.

- Use a range of technology purposefully
- Use search technologies effectively
- Use and combine a variety of software

Implementation:

Curriculum Organisation:

The Enquire Learning Trust bespoke computing curriculum offers a cross curricular scheme of work for EYFS, Key Stage 1 and Key Stage 2 which matches the expectations of the National Curriculum. The curriculum looks at the progression needed for all pupils to develop and embed skills and knowledge within the strands of: computer science, information technology and digital literacy. The curriculum is designed to support teaching and learning and the acquisition of subject knowledge in all areas. Children will have the opportunity to explore and respond to key issues such as digital communication, cyber-bullying, online safety, security and social media.

	Autumn 1		Autumn 2		Spring 1		Spring 2		Summer 1		Summer 2
Year 1	E-safety: Using the internet safely.	Information Technology Typing training.	Coding with Tynker JR	E-safety: the internet safely	Digital Literacy: Using a computer/device.		Information Technology: bug hunters Finding, saving, organising, sending, and presenting		Information Technology: Potty Painters - Digital Art and book design		Computer Science: Scratch Jnr - introduction and fundamentals
Year 2	E-safety: Staying safe on the internet – Jessie and Friends.		Computer Science: Scratch Jnr - introduction and fundamentals		Digital Literacy: Using search. Typing training.		Information Technology: Using a computer. What is the Internet.	Information Technology: Introduction to photo editing.	Information Technology: taking and using photos	Information Technology: Presentations iOS	Computer Science: Scratch Jnr - introduction and fundamentals
Year 3 Topic related activities throughout the year.	E-safety: Google Share with care		Information Technology: Research and develop a topic Use school current school topic		E-safety: Google Be Internet Brave	Computer Science: Lightbot - Algorithms	Computer Science: Tynker - Animations		Computer Science: Tynker – Loops, debugging and events.		Computer Science: Tynker – If statements. HTML App Coding
Year 4	E-safety: Google Don't fall for fake		Computer Science: Networks: Understanding the different ways computer communicate	Information Technology: Email	Information Technology: Word processing PowerPoint	Information Technology: Photo Editing - Functions	Computer Science: Tynker - Algorithms Conditions, Functions and App design		Information Technology: Stop motion animation		Computer Science: Scratch Creation of controllable maze game.
Year 5 Topic related activities throughout the year.	E-safety: Google Secure your secrets	Information Technology: Using shared cloud documents Use school current school topic	Computer Science: Spreadsheets – Using Formula to automate mathematical problems.	Computer Science: Networks: Search Algorithms	E-safety: Cyberbullying	Computer Science: Lightbot – Algorithms Procedures. Loops and Debugging	Computer Science: Scratch – Simple Game creation		Information Technology: Animation through varied apps	Information Technology: Website creation. SharePoint Use school current school topic	Computer Science: Microsoft Kodu – Advanced game creation
Year 6	E-safety: Google It's cool to be kind Interland's Kind Kingdom		Information Technology: 3D modelling using Sketchup.	Information Technology: Creating CVs Using IT beyond school	E-safety: Why is Social Media Free? Fake News in real life.	Information Technology: Making Videos	Computer Science: MIT App Inventor– Making an app about secondary schools to take home Using IT beyond school		Computer Science: HTML Hacking and Python Coding	Information Technology: ChildNet video competition	Computer Science: Swift Playground – Conditional Code, While loops and Logic.

Impact:

- Children will be confident users of technology, able to use it to accomplish a wide variety of goals, both in school and at home.
- Children will have a secure and comprehensive knowledge of the implications of technology and digital systems which is important in our ever-evolving society.
- Children will be able to apply the British Values of democracy, tolerance, mutual respect, rule of law and liberty when using digital systems.
- solve problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems

- can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems
- are responsible, competent, confident and creative users of information and communication technology.

At the Leadership Level:
Computing has a clear monitoring cycle that consists of 3 clear foci across three consecutive half terms:
1. **Development Focus Input** – identifying the work that needs to be conducted *e.g. pupil voice, staff voice, enquiry, classroom walk through, enquiry into evidence, planning alignment, learning environment evidence, data etc.*
2. **Development Activity** – focused improvement work *e.g. CPD, staff coaching/mentoring, purchase of resources etc.*
3. **Development Moderation** – impact of leadership work *e.g. pupil voice, staff voice, enquiry, classroom walk through, enquiry into saved work, planning alignment, learning environment evidence, data etc.*

Computing has an identified Subject Lead and is part of the Creative Team; staff work in teams to identify, lead and monitor the development of the curriculum across the school. This work is cyclic and builds on areas identified for development. Timely feedback is given to staff after any monitoring and the Subject Lead writes an annual causal chain to outline work undertaken and the impact they have had on the teaching and learning of Computing across the school.

At Classroom Level:
Teachers identify and save/store three examples from the project being completed to evidence someone working towards standard, someone at age related expectation and where possible someone working at greater depth.

On an annual basis teachers provide a summative assessment for children within their class. This is analysed by the Subject Lead.

Computing Subject Lead: Kylie Beach