



Long Term Overview for Computing

	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
Year R	Use the class whiteboard to mark make using finger and pen.	Exploring tools to create digital art. Exploring pattern - creating and continuing patterns with increasing complexity.	Exploring technology in our lives. Discovering how things work, comparing technology now to technology in the past.	How we use devices and go online safely. Considering what to do if we need help and record views using simple voice recording software.	Use simple instructions to move a floor robot.	Use simple program to record observations in the natural world. Build a narrative and create a digital book as a class.
Year 1	Computing systems and networks	Creating media	Programming A – Moving a robot	Data and information – Grouping data	Creating media – Digital writing	Programming B – Programming animation
Year 2	Computing systems and networks – IT around us	Creating media- Digital photography	Programming A –Robot algorithms	Data and information- pictograms	Creating media-Digital music	Programming B – programming puzzles
Year 3	Computing Systems and Networks – connecting computers	Creating Media - Stop Frame Animation	Programming A- Sequencing Sounds	Data and Information- Branching Database	Creating Media: Desktop Publishing	Programming B- Events and Actions in Programs
Year 4	Computing systems and the internet	Creating media-audio production	Programming- repetition in shapes	Data and information- data logging	Creating media-photo editing	Programming B – Repetition in games
Year 5	Computer Systems and networks – systems and searching	Creating Media – Video production	Programming A – Selection in physical computing	Flat-File databases	Introduction to Vector Drawings	Programming B – Selection in quizzes
Year 6	Computing Systems and network – Communication	Creating Media – Web page creation	Programming A – Variables in games	Data and information – Introduction to spreadsheets	SATS	Programming B – Sensing movement

Meeting our Vision and Values

Vision links:

At Platt C of E Primary School, we envision a computing curriculum that offers children essential digital skills, inspires creativity, fosters critical thinking, and establishes a strong ethical foundation. Our vision aims to prepare children to thrive in a society that is becoming increasingly reliant on technology. Our curriculum is precisely designed to capture children's curiosity in learning and motivate them to explore the vast and ever-changing world of computing. We strive to promote a lifelong love of learning and a fascination with technology's possibilities in our children, preparing them to succeed. Like the parable of the mustard seed our children will be able to grow and flourish in an interconnected digital world.

Care (compassion, friendship)	Learn (wisdom, koinonia)	Forgive (forgiveness, hope)
Through online safety, which is taught in all year groups, computing allows our children to care for one another. The annual World Safer Internet Day promotes our school's online ideals of friendship and compassion, as well as digital citizenship.	Children learn a variety of computer skills. Beginning in Year 1, students are taught how to display their work in an expanding number of digital formats, as they gain wisdom and autonomy. Children begin learning technical vocabulary in Year 1 and continue to expand it throughout the key stages that allow koinonia.	Children learn to be hopeful about solving issues by using computers. They learn to forgive themselves and recognise mistakes in their learning as a vital and exciting step towards discovery and learning.

Intent

The Teach Computing Scheme and Barefoot Computing for EYFS are continuously evolving computing schemes. We want to equip children to use computational thinking and creativity that will enable them to become active participants in the digital world. It is important to us that the children understand how to use the ever-changing technology to express themselves, as tools for learning and as a means to drive their generation forward into the future. We want to model and educate our children with regards to how to use technology effectively, safely, responsibly and positively. Whilst ensuring they understand the advantages and disadvantages associated with online experiences, we want children to develop as respectful, responsible and confident users of technology, aware of measures that can be taken to keep themselves and others safe online.

Being safe on the internet is paramount in our teaching with the children. We recognise that technology changes at a rapid pace and therefore we have chosen a curriculum that is regularly updated to keep up to date with the advancements in computing and technology. We want our children to leave our school being digitally literate and effective in their ability to use technology for all its positive benefits in the modern world.

Implementation

Our scheme of work for Computing is adapted from the 'Teach Computing' Curriculum and covers all aspects of the National Curriculum. This scheme was chosen as it has been created by subject experts and based on the latest pedagogical research. It provides an innovative progression framework where computing content (concepts, knowledge, skills and objectives) has been organised into interconnected networks called learning graphs.

The curriculum aims to equip our children with the knowledge, skills and understanding they need to thrive in the digital world of today and the future. The curriculum can be broken down into 3 strands: computer science, information technology and digital literacy, with the aims of the curriculum reflecting this distinction. Children have weekly lessons in Computing throughout school. To ensure automaticity of recall knowledge in all units of work throughout the year, teachers in Y1-6 use:

- Knowledge organisers that are available to all pupils within lessons to support their current, past and future learning. Key vocabulary for pupils to check their understanding.
- Quick quizzes- These questions at the start of each lesson help to support what the children remembered from previous learning.
- The knowledge the children need to acquire has been organised around a set of key concepts which are revisited as pupils progress through the school.

Online Safety and Digital Citizenship

A key part of implementing our computing curriculum is to ensure that the safety of our pupils is paramount. We take online safety very seriously and we aim to give children the necessary skills to keep themselves safe online. Children have a right to enjoy childhood online, to access safe online spaces and to benefit from all the opportunities that a connected world can bring them, appropriate to their age and stage. The Kapow PSHE curriculum thoroughly and regularly covers this area of learning, however, we reinforce this teaching also through our computing curriculum so that it is embedded as a cross-curricular feature so children can become masters and armed with the necessary knowledge and skills to make informed choices and know where to ask for help if needed.

Our aim is to provide a computing curriculum that is designed to balance acquiring a broad and deep knowledge alongside opportunities to apply skills in various digital contexts. Beyond teaching computing discreetly, we will give pupils the opportunity to apply and develop what they have learnt across wider learning in the curriculum.

Impact

Once embedded, the impact of the Teach Computing curriculum will not only develop knowledge, skills and key vocabulary about Computing, but children will also be able to communicate confidently about their own learning journey; having the necessary skills and growing understanding of how to make improvements to their Computing work.

The impact of the Computing curriculum can be tracked using both formative and summative assessment methods. Each lesson provides guidance to help teachers assess pupils' progress toward the learning objectives (WALT). This includes inclusive reviews of learning at the end of each lesson, as well as outcome assessment opportunities at the conclusion of each unit.

The expected impact of following the Teach Computing scheme and Barefoot Computing, within the EYFS, is that children will:

- Be digitally literate
- Be inspired to further explore the world of computing and express themselves
- Develop their ideas through information and technology as an active participant of a digital world.
- Are responsible, competent, confident and creative users of information and communication technology.