

St. Peter's CE Primary, Farnworth



Curriculum Overview

Intent and Implementation

Diet and Delivery

Computing Sep 25

What is our vision?

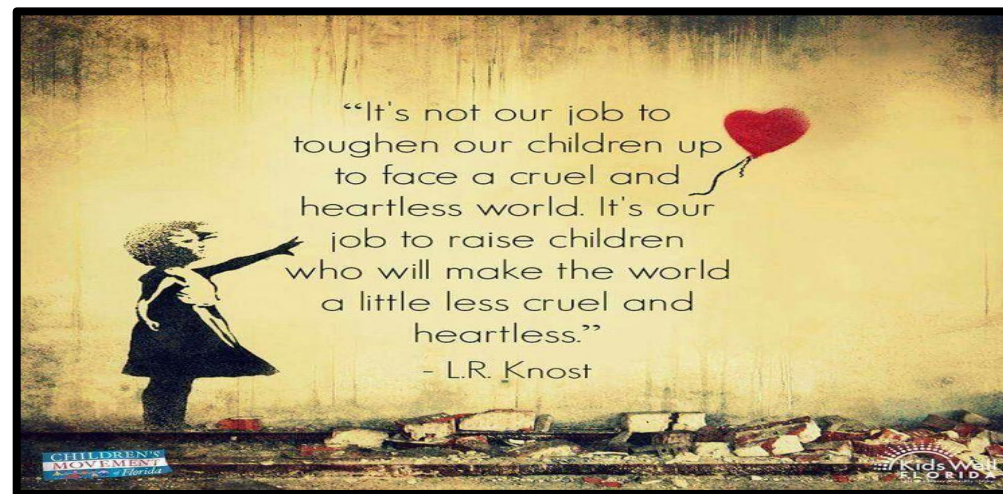
As teachers we are often charged with the task of preparing our children for their future. At St. Peter's we think a little differently, and rather than prepare our children for a future that is imposed upon them, we aim to give them the skills necessary to create the future that they perceive for themselves.

Today is the tomorrow of yesterday. By controlling today, we are creating the future of tomorrow.

Our vision is to develop our children to enable them to create the future they aspire for themselves.

Our children will contribute to and prosper in society.

Our school purpose is to signal a route to a life that many don't think possible! Our overall aim is to maximise social mobility!



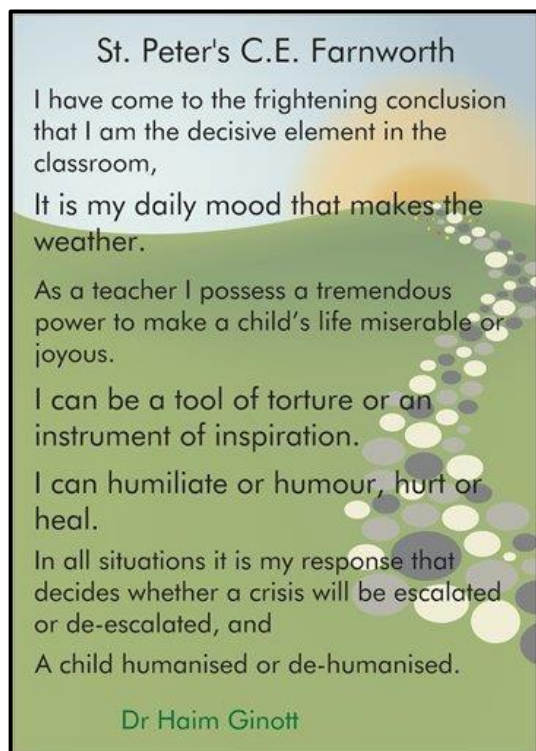
How will our vision be achieved?

We believe our vision will be achieved if we provide our children with an environment, underpinned by British and Christian values, in which they can

“Learn, **Sparkle** G Shile---”

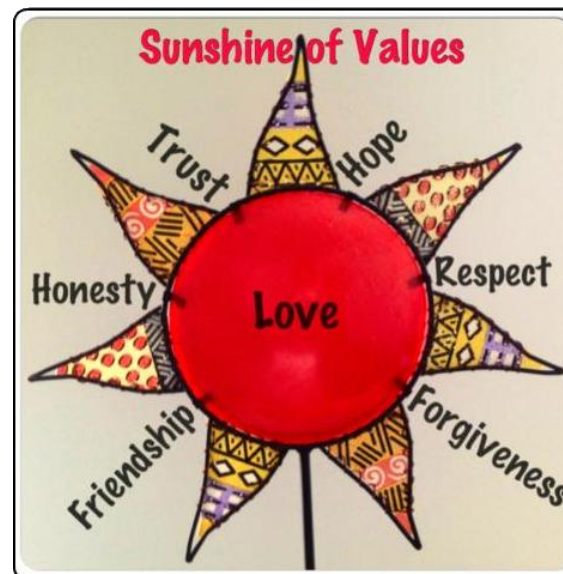
We **aim** to effect the environment to which the children are exposed, to maximise pupils’ opportunity to

“Learn, **Sparkle** G Shile..”



We **aim** to ensure our environment is underpinned by Christian and British Values; to maximise pupils’ opportunity to

“Learn, **Sparkle** G Shile---”



Our aim Our children will....	Our beliefs and values. Why?	Our strategy What will we do?	Our strategy What will you see?
Learn Allow for the development of wisdom, knowledge and skills.	We believe ability is a consequence of what happens in our classrooms not a cause! We believe inherited traits are only one part of the story of where we may end up. The environment created in our classrooms, the culture of hard work and determination that we encourage, the recognition that we are all able to increase our knowledge through learning, we believe, has an equally valid impact on our future success. (Learn)	Develop learners who recognise their own learning goals, aspirations and the role they play in determining their own destiny. (Learn) - Promote the incremental learning theory – growth mindset approach - Reward effort and attribute success to hard work and determination	Visible consistency- The aim of visible consistency is to ensure that all staff and pupils receive the same messages regarding expectation of conduct, behaviour and work ethic thus ensuring a safe environment in which effective teaching and learning can take place and risks can be taken.
Sparkle Allow for the development of individuality; character development, hope, aspiration, courageous advocacy.	We believe that engaging in a rich and varied curriculum will provide our children with an opportunity to develop a positive attitude to learning and an environment in which they can flourish and thrive. (Sparkle)	Provide a curriculum that allows for a wide range of opportunities to be promoted and excellent outcomes achieved, across a wide range of areas. (Sparkle)	Visible collaboration- The aim of visible collaboration is to ensure that children receive the same experiences across year groups and that staff are able to share their expertise and strengths so as to learn from each other.
Shine Allow for the development of community spirit – living well together.	We believe that by using Christian Values to underpin our work, children will be able to spread positive attitudes and shine as a beacon in society. (Shine)	Promote a community of kind, respectful Christian learners, with an underlying value of hope for their own future and that of the wider extended community; underpinned by Christian and British Values. (Shine)	Visible challenge- The aim of visible challenge is to support our growth mindset philosophy and recognises that learning occurs when staff and pupils are given the opportunity to go beyond their comfort zone. Visible creativity- The aim of visible creativity is to inspire a love of learning and deepen thinking.

"Where our children enter our classrooms neither impresses nor depresses us; we simply expect our children to know that they come to school to work hard and learn, growing to know and understand more through each day they spend walking down Progress Ave with us."

Learning in EYFS:

Computing from September 2021

The EYFS framework is structured very differently to the national curriculum as it is organised across seven areas of learning rather than subject areas. The aim of this document is to help subject leaders to understand how the skills taught across EYFS feed into national curriculum subjects.

This document demonstrates which statements from the 2020 Development Matters are prerequisite skills for computing within the national curriculum. The table below outlines the most relevant statements taken from the Early Learning Goals in the EYFS statutory framework and the Development Matters age ranges for Three and Four-Year-Olds and Reception to match the programme of study for computing.

The most relevant statements for computing are taken from the following areas of learning:

- Personal, Social and Emotional Development
- Physical Development
- Understanding the World
- Expressive Arts and Design

Computing			
Three and Four-Year-Olds	Personal, Social and Emotional Development		• Increasingly follow rules, understanding why they are important.
	Physical Development		• Match their developing physical skills to tasks and activities in the setting.
	Understanding the World		• Explore how things work.
Reception	Personal, Social and Emotional Development		• Show resilience and perseverance in the face of a challenge.
	Physical Development		• Develop their small motor skills so that they can use a range of tools competently, safely and confidently. • Know and talk about the different factors that support their overall health and wellbeing: -sensible amounts of 'screen time'.
	Expressive Arts and Design		• Explore, use and refine a variety of artistic effects to express their ideas and feelings.
ELG	Personal, Social and Emotional Development	Managing Self	• Be confident to try new activities and show independence, resilience and perseverance in the face of challenge. • Explain the reasons for rules, know right from wrong and try to behave accordingly.
	Expressive Arts and Design	Creating with Materials	• Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function.

Computing Year 1 - Long Term Overview

Autumn 1 Computing systems and networks	Autumn 2 Creating media
Technology around us: Recognising technology in school and using it responsibly • Use technology purposefully to create, organise, store, manipulate, and retrieve digital content • Recognise common uses of information technology beyond school • Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.	Digital painting: Choosing appropriate tools in a program to create art, and making comparisons with working non-digitally • Use technology purposefully to create, organise, store, manipulate, and retrieve digital content
Spring 1 Programming A	Spring 2 Data and information
Moving a robot: Writing short algorithms and programs for floor robots, and predicting program outcomes. • Understand what algorithms are, how they are implemented as programs on digital devices, and that programs execute by following precise and unambiguous instructions. • Create and debug simple programs • Use logical reasoning to predict the behaviour of simple programs	Grouping data: Exploring object labels, then using them to sort and group objects by properties. • Use technology purposefully to create, organise, store, manipulate, and retrieve digital content • Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies
Summer Creating media	Summer 2 Programming B
Digital writing: Using a computer to create and format text, before comparing to writing non-digitally. • Use technology purposefully to create, organise, store, manipulate, and retrieve digital content • Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies	Programming animations: Designing and programming the movement of a character on screen to tell stories. • Understand what algorithms are, how they are implemented as programs on digital devices, and that programs execute by following precise and unambiguous instructions. • Create and debug simple programs • Use logical reasoning to predict the behaviour of simple programs

Computing Year 2 - Long Term Overview

Autumn 1-computing systems and networks	Autumn 2- Creating media
Information technology around us: Identifying IT and how its responsible use improves our world in school and beyond • Use technology purposefully to create, organise, store, manipulate, and retrieve digital content • Recognise common uses of information technology beyond school • use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.	Digital photography: Capturing and changing digital photographs for different purposes • Use technology purposefully to create, organise, store, manipulate, and retrieve digital content • Recognise common uses of information technology beyond school • use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.
Spring 1 Programming A	Spring 2 Data and information
Robot algorithms: Creating and debugging programs, and using logical reasoning to make predictions. • Understand what algorithms are, how they are implemented as programs on digital devices, and that programs execute by following precise and unambiguous instructions. • Create and debug simple programs • Use logical reasoning to predict the behaviour of simple programs • use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.	Pictograms: Collecting data in tally charts and using attributes to organise and present data on a computer. • Use technology purposefully to create, organise, store, manipulate, and retrieve digital content • use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies
Summer 1 Creating media	Summer 2 Programming B
Digital music: Using a computer as a tool to explore rhythms and melodies, before creating a musical composition • Use technology purposefully to create, organise, store, manipulate, and retrieve digital content	Programming quizzes: Designing algorithms and programs that use events to trigger sequences of code to make an interactive quiz. • Understand what algorithms are, how they are implemented as programs on digital devices, and that programs execute by following precise and unambiguous instructions. • Create and debug simple programs • Use logical reasoning to predict the behaviour of simple programs • Use technology purposefully to create, organise, store, manipulate, and retrieve digital content

Computing Year 3 - Long Term Overview

Autumn 1 -Computing Systems and Networks	Autumn 2 -Creating Media
Connecting computers: Identifying that digital devices have inputs, processes, and outputs, and how devices can be connected to make networks • use sequence, selection, and repetition in programs; work with variables and various forms of input and output • understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration • select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information	Stop-frame animation: Capturing and editing digital still images to produce a stop frame animation that tells a story • use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact •select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information
Spring 1 Programming A	Spring 2 Data and information
Sequencing sounds: Creating sequences in a block-based programming language to make music. • design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts • use sequence, selection, and repetition in programs; work with variables and various forms of input and output. • use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs	Branching databases: Building and using branching databases to group objects using yes/no questions. • select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information. • use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.
Summer 1 Creating media	Summer 2 Programming B
Desktop publishing: Creating documents and modifying text, images and page layouts for a specific purpose. • use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content. • select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information.	Events and actions in programs: Writing algorithms and programs that use a range of events to trigger sequences of actions • design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts • use sequence, selection, and repetition in programs; work with variables and various forms of input and output. • use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs • select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information.

Computing Year 4 - Long Term Overview

Autumn 1-Computing Systems and Networks	Autumn 2 - Creating Media
The internet: Recognising that the internet is a network of networks including the WWW, and why we should evaluate online content. • understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration. • use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content. • select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information • use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.	Audio production: Capturing and editing audio to produce a podcast, ensuring that copyright is considered. • use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content. • select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information. • use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.
Spring 1 Programming A	Spring 2 Data and information
Repetition in Shapes: Using a text-based programming language to explore count-controlled loops when drawing shapes. • design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts • use sequence, selection, and repetition in programs; work with variables and various forms of input and output. • use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs • select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information	Data logging: Recognising how and why data is collected over time, before using data loggers to carry out an investigation. • use sequence, selection, and repetition in programs; work with variables and various forms of input and output. • select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information.
Summer 1 Creating media	Summer 2 Programming B

Computing Year 5 - Long Term Overview

Photo editing: Manipulating digital images, and reflecting on the impact of the changes and whether the required purpose is fulfilled. •use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content. •select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information. • use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.	Repetition in games: Using a block-based programming language to explore count-controlled and infinite loops when creating a game • design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts • use sequence, selection, and repetition in programs; work with variables and various forms of input and output. • use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs • select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information
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Computing Year 6 - Long Term Overview

Autumn 1- Computing Systems and Networks	Autumn 2-Creating Media
Systems and searching: Recognising IT systems in the world and how some can enable searching on the internet. - select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information - use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact. - understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration	Video production: Planning, capturing, and editing video to produce a short film. - select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information - use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact. - use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content
Spring 1 Programming A	Spring 2 Data and information
Selection in physical computing: Exploring conditions and selection using a programmable microcontroller. - design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts. - use sequence, selection, and repetition in programs; work with variables and various forms of input and output. - use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.	Flat-file databases: Using a database to order data and create charts to answer questions. - use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content. - select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information
Summer 1 Creating media	Summer 2 Programming B
Introduction to vector graphics Creating images in a drawing program by using layers and groups of objects. select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information	Selection in quizzes: Exploring selection in programming to design and code an interactive quiz. - design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts. - use sequence, selection, and repetition in programs; work with variables and various forms of input and output. - use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs. - select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information.

Computing Year 7 - Long Term Overview

Autumn 1 Computing Systems and Networks	Autumn 2 Creating Media
Communication and collaboration: Exploring how data is transferred by working collaboratively online. - design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts. - understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration. - select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information.	Webpage creation: Designing and creating webpages, giving consideration to copyright, aesthetics and navigation. - select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information - use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact. - use search technologies effectively, appreciate how results are selected and ranked, and be - discerning in evaluating digital content
Spring 1 Programming A	Spring 2 Data and information
Variables in games: Exploring variables when designing and coding a game. - design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts. - use sequence, selection, and repetition in programs; work with variables and various forms of input and output. - use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs. - select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information. - use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.	Introduction to spreadsheets: Answering questions by using spreadsheets to organise and calculate data. select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information
Summer 1 Creating media	Summer 2 Programming B

Computing Year 8 - Long Term Overview

3D modelling: Planning, developing, and evaluation 3D computer models of physical objects. • select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information. • use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.	Sensing movement: Designing and coding a project that captures inputs from physical devices • design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts. • use sequence, selection, and repetition in programs; work with variables and various forms of input and output. • use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs. • select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information.
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