SSC Computing Curriculum – Long Term Overview

At Stratford-sub-Castle Primary School we use the *Teach Computing Scheme of Work*.

MAP A

| | TERM 1 & 2 | TERM 3 & 4 | TERM 5 & 6 |
|-------------------------------|---|--|--|
| Butterfly Class (EYFS/YR1) | Technology around us Recognising technology in school and using it responsibly. | Grouping data Exploring object labels, then using them to sort and group objects by properties. | Digital writing Using a computer to create and format text, before comparing to writing non-digitally. |
| | <u>Digital photography</u> Capturing and changing digital photographs for different purposes. | Online safety (Safer Internet Day) | Programming animations Designing and programming the movement of a character on screen to tell stories. |
| Owl Class (YR1/2) | Information technology around us Identifying IT and how its responsible use improves our world in school and beyond. | Digital photography Capturing and changing digital photographs for different purposes - manipulation | Programming animations Designing and programming the movement of a character on screen to tell stories. |
| | Robot algorithms Creating and debugging programs, and using logical reasoning to make predictions. | Online safety (Safer Internet Day) | Desktop publishing Creating documents by modifying text and images |
| Robin Class (YR3/4) | Connecting computers Identifying that digital devices have inputs, processes, and outputs, and how devices can be connected to make networks. | Data logging Recognising how and why data is collected over time, before using data loggers to carry out an investigation. | Desktop publishing Creating documents by modifying text, images, and page layouts for a specified purpose. |
| | Stop-frame animation Capturing and editing digital still images to produce a stop-frame animation that tells a story. | Online safety (Safer Internet Day) | <u>Events and actions in programs</u> Writing algorithms and programs that use a range of events to trigger sequences of actions. |
| Woodpecker Class (YR4/5) | Systems and searching Recognising IT systems in the world and how some can enable searching on the internet. | Repetition in shapes Using a text-based programming language to explore count-controlled loops when drawing shapes | Photo editing Manipulating digital images, and reflecting on the impact of changes and whether the required purpose is fulfilled. |
| | Audio production Capturing and editing audio to produce a podcast, ensuring that copyright is considered. | Online safety (Safer Internet Day) | Repetition in games |

| | | | Using a block-based programming language to explore count-controlled and infinite loops when creating a game. |
|-----------|--|--|---|
| Fox Class | Communication and collaboration Exploring how | Stop-frame animation | Introduction to vector graphics |
| (YR5/6) | data is transferred by working collaboratively online. | Capturing and editing digital still images to produce a stop-frame animation that tells a story. | Creating images in a drawing program by using layers and groups of objects. |
| | Introduction to spreadsheets Answering questions by using spreadsheets to | Online safety (Safer Internet Day) | Variables in games |
| | organise and calculate data. | | Exploring variables when designing and coding a game. |

| | TERM 1 & 2 | TERM 3 & 4 | TERM 5 & 6 |
|-------------------------------|---|--|---|
| Butterfly Class (EYFS/YR1) | Digital painting Choosing appropriate tools in a program to create art, and making comparisons with working non-digitally. Online Information How information is found online and its reliability | Online safety (Safer Internet Day) Moving a robot Writing short algorithms and programs for floor robots, and predicting program outcomes | Robot algorithms Creating and debugging programs, and using logical reasoning to make predictions. Desktop publishing Using basic word processing skills to create text |
| Owl Class (YR1/2) | Digital music Using a computer as a tool to explore rhythms and melodies, before creating a musical Pictograms Collecting data in tally charts and using attributes to organise and present data on a computer. composition. | Online safety (Safer Internet Day) Digital painting Choosing appropriate tools in a program to create art, and making comparisons with working non-digitally. | Programming quizzes Designing algorithms and programs that use events to trigger sequences of code to make an interactive quiz. Online Research Using search engines to research a topic and find relevant information |
| Robin Class (YR3/4) | Variables in games Exploring variables when designing and coding a game. Online – information How information is found online and its reliability | Sequencing sounds Creating sequences in a block-based programming language to make music. Online safety (Safer Internet Day) | Branching databases Building and using branching databases to group objects using yes/no questions. Selection in quizzes Exploring selection in programming to design and code an interactive quiz. |
| Woodpecker Class (YR4/5) | The internet Recognising the internet as a network of networks including the WWW, and why we should evaluate online content. Video production Planning, capturing, and editing video to produce a short film. | Selection in physical computing Exploring conditions and selection using a programmable microcontroller. Online safety (Safer Internet Day) | Webpage creation - Blogging Designing and creating webpages, considering copyright, aesthetics, and navigation. Flat-file databases Using a database to order data and create charts to answer questions. |
| Fox Class (YR5/6) | Data logging | Webpage creation | 3D modelling Planning, developing, and evaluating 3D computer models of physical objects. |

| Recognising how and why data is collected over | Designing and creating webpages, giving | |
|---|---|---|
| time, before using data loggers to carry out an | consideration to copyright, aesthetics, and | Sensing movement |
| investigation. | navigation. | Designing and coding a project that captures inputs |
| | | from a physical device. |
| Desktop publishing | Online safety (Safer Internet Day) | |
| Creating documents by modifying text, images, and | | |
| page layouts for a specified purpose. Word | | |
| Processing | | |
| | | |