Long Term Plan – (Computing Overview KS1)

| Computing National Curriculum Statements and Strands | |
|---|---|
| Reception | FROM REVISED FRAMEWORK – STARTS SEPT 2021 |
| Key Stage 1 | 1.1 Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions |
| | 1.2 Create and debug simple programs |
| | 1.3 Use logical reasoning to predict the behaviour of simple programs |
| | 1.4 Use technology purposefully to create, organise, store, manipulate and retrieve digital content |
| | 1.5 Recognise common uses of information technology beyond school |
| | 1.6 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. |
| Computing Strands | (NW) Networks, (CM) Creating Media, (DI) Data & Information, (DD) Design & Development, (CS) Computing Systems, (IT) Impact of Technology, (AL) Algorithms, (PG) Programming, (ET) Effective Use of tools, (SS) Safety & Security |
| Education for a connected world | Health, well-being and lifestyle, Copyright and ownership, Online relationships, Online reputation, Online bullying, Managing online information, Health, well-being and lifestyle, Privacy and security, Copyright and ownership, |

| Year group | Details | Autumn 1 | Autumn 2 | Spring 1 | Spring 2 | Summer 1 | Summer 2 |
|---|---|---|---|---|---|---|---|
| Year 1 | SOL unit title | Technology around us | Digital Painting | Moving a robot | Grouping Data | Digital Writing | Programming Animations |
| | NC links | 1.4, 1.5, 1.6 | 1.4 | 1.1, 1.2, 1.3, 1.5 | 1.4, 1.6 | 1.4, 1.6 | 1.1, 1.2, 1.3, 1.4 |
| | Computing strand | CS, ET, IT | CM, DD, ET | AL, DD, IT, PG | DI | CM, DD, ET | AL, DD, PG |
| | Education for a connected world | - Copyright and ownership<br>- Health, well-being and lifestyle | | | Copyright and ownership | Privacy and security | |
| | RSHE links | | | | | | |
| Year 2 | SOL unit title | Information Technology around us | Digital Photography | Robot Algorithms | Pictograms | Making Music | An Introduction to Quizzes |
| | NC links | 1.4, 1.5, 1.6 | 1.4, 1.5 | 1.1, 1.2, 1.3, 1.14 | 1.4, 1.6 | 1.4 | 1.1, 1.2, 1.3 |
| | Computing strand | CS, NW, SS | CM, CS, DD, ET | AL, DD, PG | DI, ET, SS | CM, DD, DI, ET | PG, DD |
| | Education for a connected world | Health, well-being and lifestyle | Self-image and identity | | Privacy and security | Copyright and ownership | |

# Long Term Plan – (Computing Overview KS2)

| Computing National Curriculum Statements and Strands | |
|---|---|
| **Key Stage 2** | **2.1** Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts |
| | **2.2** Use sequence, selection, and repetition in programs; work with variables and various forms of input and output |
| | **2.3** Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs |
| | **2.4** 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 |
| | **2.5** Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content |
| | **2.6** 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 |
| | **2.7** Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact. |
| **Computing Strands** | (NW) Networks, (CM) Creating Media, (DI) Data & Information, (DD) Design & Development, (CS) Computing Systems, (IT) Impact of Technology, (AL) Algorithms, (PG) Programming, (ET) Effective Use of tools, (SS) Safety & Security |
| **Education for a connected world** | Health, well-being and lifestyle, Copyright and ownership, Online relationships, Online reputation, Online bullying, Managing online information, Health, well-being and lifestyle, Privacy and security, Copyright and ownership, |

| Year group | Details | | Autumn 1 | Autumn 2 | Spring 1 | Spring 2 | Summer 1 | Summer 2 |
|---|---|---|---|---|---|---|---|---|
| **Year 3** | *SOL unit title* | | Connecting Computers | Stop-frame Animation | Sequence in music | Branching databases | Desktop publishing | Events and actions |
| | *NC links* | | 2.2, 2.4, 2.6, 2.7 | 2.6 | 2.1, 2.2, 2.3, 2.6 | 2.6 | 2.5, 2.6 | 2.1, 2.2, 2.3, 2.6 |
| | *Computing strand* | | CS, IT, NW | CM, DD, ET, | AL, CM, DD, ET, PG | DD, DI, ET | CM, DD, ET, IT | DD, ET, PG |
| | *Education for a connected world* | | | Copyright and ownership, Managing online information | | | Copyright and ownership, Managing online information | |
| **Year 4** | *SOL unit title* | | The Internet | Audio editing | Repetition in shapes | Data logging | Photo editing | Repetition in games |
| | *NC links* | | 2.4, 2.5, 2.6, 2.7 | 2.5, 2.6, 2.7 | 2.1, 2.2, 2.3, 2.6 | 2.2, 2.6 | 2.5, 2.6, 2.7 | 2.1, 2.2, 2.3, 2.6 |
| | *Computing strand* | | CM, IT, NW, SS | CM, CS, DD, DI, ET | AL, ET, PG | CS, DI, ET | CM, DD, ET, IT | AL, DD, PG |
| | *Education for a connected world* | | | Copyright and ownership | | | Copyright and ownership, Self-image and identity | |
| **Year 5** | *SOL unit title* | | Sharing information | Vector drawing | Selection in physical computing | Flat-file databases | Video editing | Selection in quizzes |
| | *NC links* | | 2.1, 2.2, 2.4, 2.6, 2.7 | **2.6** | 2.1, 2.2, 2.3, 2.6 | 2.5, 2.6 | **2.5, 2.6, 2.7** | 2.1, 2.2, 2.3, 2.6 |
| | *Computing strand* | | CS, DD, ET, IT, NW | **CM, DI, ET** | CS, DD, PG | DD, DI, ET | **CM, CS, DD, ET, SS** | AL, DD, PG |
| | *Education for a connected world* | | Copyright and ownership | **Copyright and ownership** | | | - Managing online information<br>- Online relationships<br>- Online reputation<br>- Self-image and identity | |
| **Year 6** | *SOL unit title* | | 3D Modelling | Web page creation | Communication | Variables in games | Introduction to spreadsheets | Sensing |
| | *NC links* | | 2.6, 2.7 | 2.5, 2.6, 2.7 | 2.1, 2.4, 2.5, 2.6, 2.7 | 2.1, 2.2, 2.3, 2.6 | 2.6 | 2.1, 2.2, 2.3, 2.6 |
| | *Computing strand* | | CM, DD, ET | CM, DD, ET, NW, IT SS | ET, IT, NW. DD | DD, PG | DI, CM, ET, PG | CS, DD, PG |
| | *Education for a connected world* | | *Privacy and security* | - Copyright and ownership<br>- Online relationships | Managing online information<br>- Online reputation | | | |