Willow Primary Academy

Computing Curriculum



*Whether you want to uncover the secrets of the universe, or pursue a career the 21st Century, basic computer programming is an essential skill to learn.”* ***Stephen Hawking***

**INTENT**

At Willow Primary Academy, we aim to develop pupils who are responsible, competent, confident and creative users of information and communication technology. We ensure that children understand the E-Safety messages about how to stay safe online and understand and follow the SMART e-safety rules. They also understand the importance of governance and legislation regarding how information is used, stored, created, retrieved, shared and manipulated. Pupils will become responsible, respectful and competent users of data, information and communication technology who can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems. They will become digitally literate and will be prepared to be active participants in a digital world.

**Delivery**

* Teachers plan effectively using the Purple Mash scheme of work.
* The Purple Mash scheme of work enables clear coverage of the computing curriculum whilst also providing support and CPD for less confident teachers to deliver lessons.
* The Purple Mash lessons are broken down into weekly units, usually with two units taught per half term.
* The order of units can be moved around to suit their curriculum intent.
* Units are practical and engaging and allow computing lessons to be hands on.
* Units cover a broad range of computing components such as coding, spreadsheets, Internet and Email, Databases, Communication networks, touch typing, animation and online safety.
* Lessons are delivered from lesson plans with accompanying slide shows.
* The teachers utilise units in a way that meets the pupils needs.
* Teachers can follow the children’s interests to ensure their learning is engaging, broad and balanced.
* Purple Mash cloud is used for saving work.
* Vocabulary for each year group and unit is clearly shown on plans.
* Knowledge Organisers provide a clear overview.
* Teachers ensure that ICT and computing capability is also achieved through core and foundation subjects and where appropriate and necessary ICT and computing should be incorporated into work for all subjects where possible.
* Willow also uses Tapestry for Reception pupils and Class Dojo is used from Year 1 to Year 6 for homework and ad hoc communication.

**Progression**

* Learning outcomes are designed to progressively meet the expectations of each unit of work.
* Many assessment opportunities relate directly to the unit expectations and are listed in the assessment focus.
* An array of tools is provided for measuring and improving subject performance across the school in relation to all stake holders.
* Progression documents are provided as a mechanism for children to identify the progress they are making against core skills.
* Evidence of progression in computing is collected in named school files on the server where pupils pick and save work to include and it is shared with their peers to assess and discuss.
* When assessing computing we look for evidence of knowledge of understanding as well as technical skills. Pupils will talk about what they have learned as well as showing the work they have completed, provide important evidence of learning. We assess through observation of work on tasks, contribution to class discussion and peer discussions.
* Catch-Up units for Coding and Spreadsheets exist for Years 2 to 6. These are designed to close gaps if needed.
* The scheme for Early Years (Reception) shows opportunities for using Mini Mash or Purple Mash as part of the Early Years classroom to support children in working towards early learning goals. Children in the Early Years will have access to a range of devices and remote-controlled toys and resources so that they can explore simple technologies independently and use them in their learning and play.
* Throughout Key Stage one, children are taught to use technology purposefully to create, organise, store, manipulate and retrieve digital content.
* In Key Stage two, children select, use and combine a variety of software on a range of digital devices to design and create a range of programs, systems and content that accomplishes given goals.

**IMPACT**

At Willow Primary Academy, our Computing Curriculum is high quality, well thought out and is planned to demonstrate progression and build on and embed current skills. Children become increasingly proficient on school equipment and have good, transferable knowledge and understanding of online safety which is transferred into their own lives. Through Purple Mash, Tapestry and Class Dojo, children have a broad base of transferable knowledge which can be used on other similar platforms.

**Long Term Plan – 2022 – 23**

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|  | **Term 1** | | **Term 2** | | **Term 3** | |
| **FS** | Evident through enhanced provision | | | | | |
| **Year 1** | Unit 1.1 Online Safety  Unit 1.2 Grouping and Sorting | Unit 1.3 Pictograms  Unit 1.4 Lego Builders | Unit 1.5 Maze explorers  Unit 1.8 Spreadsheets | Unit 1.6  Animated Story Books | Unit 1.7 Coding | Unit 1.9 Technology outside school |
| **Year 2** | Unit 2.2 Online Safety  Unit 2.5 Effective Searching | Unit 2.6 Creating pictures | Unit 2.4 Questioning  Unit 2.7 Making Music | Unit 2.3 Spreadsheets | Unit 2.8 Presenting ideas | Unit 2.1 Coding |
| **Year 3** | Unit 3.2 Online Safety  Unit 3.4 Touch typing | Unit 3.6 Branching Databases  Unit 3.7 Simulations | Unit 3.5 Emailing | Unit 3.1 Coding | Unit 3.3 Spreadsheets  Unit 3.8 Graphing | Unit 3.9 Presenting (PPT) |
| **Year 4** | Unit 4.2 Online Safety  Unit 4.7 Effective Search | Unit 4.6 Animation  Unit 4.5 Logo | Unit 4.1 Coding | Unit 4.4 Writing for different audiences | Unit 4.3 Spreadsheets | Unit 4.8 Hardware  investigators  Unit 4.9 Making Music |
| **Year 5** | Unit 5.2 Online Safety  Unit 5.4 Databases | Unit 5.1 Coding | Unit 5.3 Spreadsheets | Unit 5.6 Word processing | Unit 5.5 Game Creator | Unit 5.6 3D modelling  Unit 5.7 Concept Maps |
| **Year 6** | Unit 6.2 Online Safety  Unit 6.4 Blogging | Unit 6.6 Networks  Unit 6.8 Understanding Binary | Unit 6.5 Text Adventures | Unit 6.7 Quizzing | Unit 6.1 Coding | Unit 6.9 Spreadsheets |