Curriculum Intent

Computing

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| **Intention**  Pupils at Seagrave confidently use technology within their personal lives. This includes accessing social media site and communicating with family and friends. Our intention is to ensure pupils are using their technology safely and are aware of the dangers of the internet, cyper bullying and how to keep safe. This is why every year begins with this area of the curriculum (this is then revisited through PSHE and assemblies throughout the year. Parent support is also offered).  The pupils will then learn to use a variety of software to support their learning – this becomes more complex as they progress through the years. They will also develop their understanding of coding and debugging from EYFS (Programmable toys) to year 5/6 (microbit technology). | | | | |
|  | **EYFS** | **Year 1/2** | **Year 3/4** | **Year 5/6** |
| **Autumn 1** | Knows how to operate simple equipment, e.g. turns on CD player and uses remote control.  Shows an interest in technological toys with knobs or pulleys, or real objects such as cameras or mobile phones.  Shows skill in making toys work by pressing parts or lifting flaps to achieve effects such as sound, movements or new images. | 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. | use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact | 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 |
| **Implementation (first stage)**  **CYCLE A** | Role play area – technology toys  Ipad apps – phonics  Using Paint  Taking photographs | Internet safety  Basic skills   * Opening * Saving * Retrieving * Mouse control * Typing (Sebran)   Linked to farm topic | Internet safety  NSPCC – speak out stay safe | Internet safety  NSPCC – speak out stay safe  Online research skills – space |
| **Implementation (first stage)**  **CYCLE B** | Internet safety  Basic skills   * Opening * Saving * Retrieving * Mouse control   Typing (Sebran)  Linked to Zoo topic | Internet safety – social media  Links to globalisation | Internet safety  NSPCC – speak out stay safe  Online research skills – monarchs |
| **Autumn 2** | Completes a simple program on a computer.  Uses ICT hardware to interact with age-appropriate computer software. | Use technology purposefully to create, organise, store, manipulate and retrieve 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 | 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 |
| **Implementation (first stage)**  **CYCLE A** | Topic reralted apps – click and drag  Mouse control  2count | Purposefully using technology   * Word * Internet * Typing/editing | Word processing  Presentation skills – Powerpoint   * Text * Graphics * Transitions | Safe use cont.  Comic lite (ipads) |
| **Implementation (first stage)**  **CYCLE B** |  | Purposefully using technology   * Powerpoint * Internet * Typing and editing | Word processing  Formatting tools – images and text |  |
| **Spring 1** | Knows that information can be retrieved from computers | 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  Recognise common uses of information technology beyond school | 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 | 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  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 |
| **Implementation (first stage)**  **CYCLE A** | Introduction to word processing | Bee bots  Roamer  2go  Technology in Seagrave (local study) | Movie maker (ipads) | Powerpoint   * Embed sound * Embed video * Set timing * Transitions/design – effectiveness |
| **Implementation (first stage)**  **CYCLE B** | Bee bots  Roamer  2go  Linked to traditional tales | Using the internet for research  Creating documents – graphics, text and movies to present the information.  Inventions | Powerpoint   * Embed sound * Embed video * Set timing   Transitions/design – effectiveness |
| **Spring 2** | Knows how to operate simple equipment, e.g. turns on CD player and uses remote control.  Uses ICT hardware to interact with age-appropriate computer software. | Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions  Use logical reasoning to predict the behaviour of simple programs  Create and debug simple programs  Use technology purposefully to create, organise, store, manipulate and retrieve 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  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  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 |
| **Implementation (first stage)**  **CYCLE A** | Bee bots  Remote controlled cars  Electronic toys | Bee bots  Roamer  2go  Comic lite – ipad app | Pic collage  Soda snap   * Combining text and graphics | Creating comics  Databases and spreadsheets |
| **Implementation (first stage)**  **CYCLE B** | Bee bots  Roamer  2go  Comic lite – ipad app | Scratch – questions and quizzes | Story board creator |
| **Summer 1** | Knows how to operate simple equipment, e.g. turns on CD player and uses remote control.  Uses ICT hardware to interact with age-appropriate computer software.  Completes a simple program on a computer. | Use technology purposefully to create, organise, store, manipulate and retrieve digital  Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions | 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 | |
| **Implementation (first stage)**  **CYCLE A** | Roamer  2go software | Paint – apps  Databases and data handling  2count  2graph | Roamer world  2go  Kodable  Hour of code | Scratch  Hour of code |
| **Implementation (first stage)**  **CYCLE B** | Combining texts and graphics in word. (outcome – human body poster)   * Input text * Basic editing * Inserting a clip art/provided image | Blue Bots  2go | Micro-bit technology  The micro bit bot challenge |
| **Summer 2** | Children recognise that a range of technology is used in places such as homes and schools. They select and use technology for particular purposes | Use technology purposefully to create, organise, store, manipulate and retrieve digital | 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 | |
| **Implementation (first stage)**  **CYCLE A** | Using the internet – safety  Paper based data bases | Presentation of topic work – 2publish | Roamer world  2go  Kodable  Kodu | Hour of code (code studio)  Scratch  Construct 2 |
| **Implementation (first stage)**  **CYCLE B** | Using powerpont to present work   * Text * Graphics * Themes | Blue bot and Bee bot dances  Music for the dances – garage band | Micro-bit technology  The micro bit bot challenge |
| Impact  Pupil understanding will be recorded through a digital portfolio and target tracker statements. The subject leader will continue to monitor breadth and depth and pupil understanding through pupil conferencing, learning walks and book trawls.  **Pupils will leave Seagrave with the skills required to access technology in a safe and efficient manner. Pupils will understand the limitations and potential of computing within the wider world.** | | | | |