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| **Computing**  **(Y1 scheme)** | | |
| **Term 1.1**  Computing Systems and Networks: Improving Mouse Skills | | |
| Vocabulary | Knowledge | Objectives |
| account  click  drag and drop  password  resize  screen (monitor) | Use computers more purposefully  Log in and navigate around a computer  Drag, drop, click and control a cursor using a mouse  Use software tools to create art on the computer | 1. To log in to a computer and access a website. 2. To develop mouse skills. 3. To use mouse skills to draw and edit shapes. 4. To draw a scene from a story using digital tools. To create a self-portrait using digital techniques. |
| **Term 1.2**  Programming 1: Algorithms unplugged | | |
| Vocabulary | Knowledge | Objectives |
| algorithm  artificial intelligence  bug  code  debug  directions  instructions | Explain what an algorithm is.  Write clear algorithms.  Follow an algorithm.  Explain what inputs and outputs are.  Create an achievable program.  Decompose a design into steps.  Identify bugs in an algorithm and how to fix them. | 1. To understand what an algorithm is. 2. To follow instructions precisely to carry out an action. 3. To understand that computers and devices around us use inputs and outputs. 4. To understand and be able to explain what decomposition is. 5. To know how to debug an algorithm. |
| **Term 2.1**  Skills showcase: Rocket to the moon | | |
| Vocabulary | Knowledge | Objectives |
| Annotate  cells  digital content & image  e-document  edit  software | Use a computer to make a list  Explain the benefits of making a list on the computer  Use a basic range of tools on graphics editing software to design a rocket  Sequence instructions  Follow instructions to build their model rocket Input data about their rockets into a table or spreadsheet | 1. To recognise that digital content can be represented in many forms. 2. To design a rocket using a graphics editing programme. 3. To sequence a set of instructions. 4. To build a rocket. 5. To test a design and record data. |
| **Term 2.2**  Programming 2: Bee-Bot | | |
| Vocabulary | Knowledge | Objectives |
| demonstration  explain  explore  inputting  precise  review | Recognise cause and effect when pressing buttons on a Bee-Bot.  Discuss and demonstrate how the Bee-Bot works.  Record video, ensuring everyone is in the shot. Give several clear instructions in sequence. Program a Bee-Bot to reach a destination. Identify and correct mistakes in their programming | 1. To explore a new device. 2. To create a demonstration video. 3. To plan and follow a precise set of instructions. To program a device. 4. To create a program that tells a story. |
| **Term 3.1**  Creating media: Digital imagery | | |
| Vocabulary | Knowledge | Objectives |
| background  blurred  crop  device  digital camera  download  filter | Plan a pictorial story using photographic images in sequence.  Explain how to take clear photos.  Take photos using a device.  Edit photos by cropping, filtering and resizing. Search for and import images from the internet. Explain what to do if something makes them uncomfortable online.  Organise images on the page, orientating where necessary. | 1. To understand and create a sequence of pictures. 2. To take clear photos. 3. To search for and import images. 4. To create a photo collage. |
| **Term 3.2**  Data handling: Introduction to data | | |
| Vocabulary | Knowledge | Objectives |
| bar chart  block graph  branching database  categorise  click and drag  compare  data collection | Represent animal-themed data in different ways, using objects and technology.  Log in and use mouse and keyboard skills to navigate the computer.  Represent the same data as a pictogram and a table or chart.  Collect data about minibeasts using a tally chart and represent data digitally.  Click and drag objects to sort data using a branching database.  Consider the types of input used to gather different forms of data when designing an invention. | 1. To show data in different ways. 2. To use technology to represent data. 3. To collect and record data. 4. To sort data into a branching database. 5. To design an invention to gather data. |