

### Area of study

### Your child will ... (Knowledge)

### Your child will be able to... (Skills)

#### Autumn Term

Autumn Photo Booth Digital Literacy Project

- Understand that photo editing is one of many practical applications of computing.
- Know examples of where photo-editing could be used, e.g. magazines, websites, adverts
- Be aware that there can be legal implications from using images.
- Know key terms like layering, cutting, etc.

- **Be able to cut parts of images out**
- **Can use layers to adjust and combine images**
- **Can apply filters and effects to images**
- **Can use search engine settings to find images that can be used without copyright implications**

#### Spring Term

Spring 1 Algorithms

- Recall the different flowchart symbols, and be able to read flowcharts
- Know what a searching algorithm is
- Can name the key two examples, and understand that they operate in different ways

- Can apply linear search to a set of data
- Can order data and apply binary search on the data
- Can describe why algorithms can be useful in the modern world

Spring 2 Python Programming

- Knows that algorithms can support writing code.
- Understands that Turtle is a part of Python, and it uses code to create visual images.
- Knows how to run Turtle code, and can recall the names of some of the basic functions

- Can apply computational thinking skills to solve drawing problems using Python and Turtle
- Can apply loops to complete repetitive processes in a small amount of code

### Area of study

### Your child will ... (Knowledge)

### Your child will be able to... (Skills)

#### Summer Term

<p>Summer 1 E-Safety</p>	<ul style="list-style-type: none"> <li>• Know that there can be risks by interacting with others online.</li> <li>• Know that there are ways to keep data safe when sending it to others online, e.g. encryption</li> <li>• Know that some websites could harm your computer.</li> </ul>	<ul style="list-style-type: none"> <li>• Be able to encrypt data in some circumstances e.g. using Office software</li> <li>• Can recognise when software, websites or communication may have security flaws</li> </ul>
<p>Summer 2 Bits &amp; Pieces 2</p>	<ul style="list-style-type: none"> <li>• Know what networks are used for, and be able to name some of the most important types.</li> <li>• Be aware that protocols are required to standardise data sent on networks.</li> <li>• Be able to name and recognise key hardware used in networks</li> </ul>	<ul style="list-style-type: none"> <li>• Choose the best network for different situations, and justify using the advantages and disadvantages of networks.</li> <li>• Can explain why different protocols are needed in different scenarios</li> <li>• Can compare different hardware choices.</li> </ul>