

## Computing – Year 6

### Autumn 1

#### Computer Systems and Networks - Internet communication

- The World Wide Web is part of the internet where we can visit webpages and websites (WWW.)
- Web browsers (Google Chrome, Safari, Firefox, Internet Explorer) You need these to access the World Wide Web.
- Ranking is the process that search engines use to determine the order in which search results will be displayed.
- Selection: A search engine creates an index of the World Wide Web using web crawlers. When a search takes place, results are selected from the search engine's index and delivered to the user.
- We can communicate over the internet and World Wide Web, but we must do so responsibly.

### Autumn 2

#### Creating Media - Webpage Creation

- The World Wide Web is part of the internet where we can visit webpages and websites (WWW.)
- Web browsers (Google Chrome, Safari, Firefox, Internet Explorer) You need these to access the World Wide Web.
- Presenting is when you can use a sequence of multimedia formats, such as images, video, audio and text to demonstrate knowledge or skilled learned.
- Ranking is the process that search engines use to determine the order in which search results will be displayed.
- Evaluating is to judge or calculate the quality, importance, amount, or value of something.

### Spring 1

#### Data - Introducing spreadsheets

- Collecting locating and organising data.
- Analysing examine (something) in detail to explain and interpret data and information.
- Evaluating is to judge or calculate the quality, importance, amount, or value of something.
- Presenting is when you can use a sequence of multimedia formats, such as images, video, audio and text to demonstrate knowledge or skilled learned.
- Logical Reasoning is the process of applying rules to problem solving in an orderly way.

### Spring 2

#### Programming - Variables in Games

- An **algorithm** is a precise set of ordered instructions which can be turned into code
- **Coding** is how we communicate with computers. Code tells a computer what actions to take.
- **Variables** are data values that can change when the user is asked a question for example your age.
- **Bug**: A mistake in the code.
- **Debugging** is checking the code in a computer program to ensure it works and changing it if it doesn't.
- Different programs act in different ways, some code is in a:
  - Sequence - An order of events.
  - Selection - the process of making a decision.
  - Repetition - A repeat in code, repeating a sequence of instructions a certain number of times.
  - **Variable**: something that can be changed.

### Summer 1

#### Creating Media - 3D Modelling

- **Software** is the programme or operating system that a computer uses.
- **Hardware** is the physical components of a computer.
- Information Technology can help us to design, create programs, collect information, analyse data and present information.

	<ul style="list-style-type: none"> <li>• Different <b>Software</b> on digital devices helps people and industries to do different things.</li> <li>• You can use <b>software</b> on digital devices to design and create</li> <li>• 3D models can be created on a computer</li> <li>• Presenting is when you can use a sequence of multimedia formats, such as images, to demonstrate knowledge or skills learned</li> <li>• Evaluating is to judge or calculate the quality, importance, amount, or value of something.</li> </ul>
<b>Summer 2</b>	
<b>Programming – Sensing</b>	<ul style="list-style-type: none"> <li>• An <b>algorithm</b> is a precise set of ordered instructions which can be turned into code</li> <li>• <b>Coding</b> is how we communicate with computers. Code tells a computer what actions to take.</li> <li>• Different programs act in different ways. <ul style="list-style-type: none"> <li>○ <b>Sequence</b> - An order of events.</li> <li>○ <b>Selection</b> - the process of making a decision.</li> <li>○ <b>Repetition</b> - A repeat in code, repeating a sequence of instructions a certain number of times.</li> <li>○ <b>Variable</b>: something that can be changed.</li> </ul> </li> <li>• Input: Data provided to a computer system, such as via a keyboard, mouse, microphone, camera or physical sensors.</li> <li>• A process is when a computer follows a set of instructions using the data that has been input.</li> <li>• Outputs The information produced by a computer system for its user; items on a screen, speakers, lights.</li> </ul>