

Lyng Primary School Knowledge Organiser

Computing

Topic: Computing



Spring 1

Network

Year 6

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| What Goldilocks and Step On words will I use? |
| **Spelling** | **Defintion** |
| Acrostic code | when the first letter (and/or the last) or syllable of every word, line, or paragraph spells out a secret message |
| Cipher | Secret, disguised code |
| Chip and pin | Personal Identification Number linked to a debit or credit card |
| Secure | Something that is safe |
| Trial and error | a fundamental method of problem-solving characterized by repeated, varied attempts which are continued until success, or until the practicer stops trying. |

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Aims of this unit

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.

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.

**Safeguarding**

Filtering and monitoring system is in place. Children will use their own log in details to track any misuse and to protect the child from harmful websites and pop ups. Children will be reminded of how to stay safe online and to use technology safely and respectfully and to tell a trusted adult if there is anything on their computer that makes them uncomfortable. When using the iPads, the monitoring software will track which iPad has been used to enable us to know which class has used the iPad.

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| Outcomes |
| **Secure*** Explain that codes can be used for a number of different reasons and decode messages.
* Explain how to ensure a password is secure and how this works.
* Create a simple website with information about Bletchley Park including the need to build electronic thinking machines to solve cipher codes.
* Explain the importance of historical figures and their contribution towards computer science.
* Present information about their historical figure in an interesting and engaging manner.
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**Agreed outcome**

Create a fact file about their learning

Autumn Term

Network

**In this unit…**

Children are taught that there are different types of secret codes and explore some of these. They will learn about why secure passwords are needed and how hackers are able to crack passwords if they are not strong. Linking to WW2, the children will learn about the enigma machine and the importance of Bletchley Park. The children will focus on historical figures who have helped contribute to advancements in technology.