



Becoming a Computer Whiz at Rimrose Hope CE Primary School





Becoming a Computer Whiz at Rimrose Hope "It should be mandatory that you understand computer science." will.I.am,
Musician, Entrepreneur, Philanthropist

There are three aspects to the Computing curriculum and these are:

Computer Science

This aspect teaches our children how digital systems like computers, iPads and mobile phones work and how they should use this knowledge through programming. Programming is the language that these systems use.

Information Technology

This aspect teaches children are to create and use their own programmes and systems.

Digital Literacy

This aspect helps us to make sure our children can use, express themselves and develop their ideas through information technology - at a level that is suitable for a future workplace in a digital world. Through this aspect, we would also enforce the message of children being safe online and knowing what to do if they have any concerns.





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"Learning to program stretches your mind and helps you think better and creates a better way of thinking."

Bill Gates, Entrepreneur, Investor, Author and Philanthropist

A Year 1 Rimrose Hope Computer Whiz will:

Computer Science

- create simple programmes
- understand that it is important to give clear and logical instructions

Information Technology

- know how to open and save their documents
- know how to use IT in different ways and on a variety of devices

Digital Literacy

- understand and respect privacy
- know that sometimes people use computers unsafely and that they should be careful online

Help! What do these words mean?

programmes - A computer program is a collection of instructions designed to make a process simple, whether that be writing a Word document or connecting to a website. A computer program is written using programming language, which allows a computer scientist to teach a computer how to achieve a result.

devices - Things like computers, iPads, cameras, microphones etc.

A Year 2 Rimrose Hope Computer Whiz will:

Computer Science

- understand what an algorithm is and how devices use them
- be able to debug a simple programme

Information Technology

- organise, store and find data

Help! What do these words mean?

algorithm - An algorithm is a set of instructions that we complete in order to achieve a task. You could write an algorithm to complete simple tasks such as making a cup of tea or a sandwich. In computing an algorithm refers to the set of instructions that a computer follows in the order in which they are given.

debug - Debugging is checking the code in a computer program to ensure it works and changing it if it doesn't. When writing a





Digital Literacy

- know why and how IT is important and what it can be used for
- know to keep information about themselves private (e.g. passwords, name, address)
- know what to do and who to tell if they are worried about something or someone online

computer program things will often go wrong, so it's important to test and debug your programs to ensure it is producing the correct results.

programmes - A computer program is a collection of instructions designed to make a process simple, whether that be writing a Word document or connecting to a website. A computer program is written using programming language, which allows a computer scientist to teach a computer how to achieve a result.

data - Data is information.

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 "The science of today is the technology of tomorrow."
 Edward Teller, Physicist

A Year 3 Rimrose Hope Computer Whiz will:

Computer Science

- write simple programmes to do specific things

Information Technology

- be able to explain what a computer network is
- be able to explain how computer networks are linked to the internet

Digital Literacy

- understand the benefits and threats of using the internet
- know how they can minimise the threats and stay safe

Help! What do these words mean?

programmes - A computer program is a collection of instructions designed to make a process simple, whether that be writing a Word document or connecting to a website. A computer program is written using programming language, which allows a computer scientist to teach a computer how to achieve a result.

computer network - Computers linked within a building or area.





<p>A Year 4 Rimrose Hope Computer Whiz will:</p> <p><u>Computer Science</u></p> <ul style="list-style-type: none">- be able to explain logically how and why algorithms work- be able to find problems in algorithms and fix them by following each step <p><u>Information Technology</u></p> <ul style="list-style-type: none">- be able to use a search engine to find information and understand how the results are ranked from the best match to the least <p><u>Digital Literacy</u></p> <ul style="list-style-type: none">- recognise acceptable and unacceptable behaviour on social media and will know how to respond to it	<p>Help! What do these words mean?</p> <p>algorithm - An algorithm is a set of instructions that we complete in order to achieve a task. You could write an algorithm to complete simple tasks such as making a cup of tea or a sandwich. In computing an algorithm refers to the set of instructions that a computer follows in the order in which they are given.</p> <p>search engine - a program that searches for information and orders them using keywords or characters that have been chosen by the user. Search engines are especially used for finding particular websites on the World Wide Web.</p> <p>social media - websites and apps that allow users to create and share content or to participate in social networking.</p>
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"In 15 years we'll be teaching programming just like reading and writing and wondering why we didn't do it sooner."

Mark Zuckerberg, Computer Programmer and Entrepreneur

<p>A Year 5 Rimrose Hope Computer Whiz will:</p> <p><u>Computer Science</u></p> <ul style="list-style-type: none">- be able to use sequence, selection and repetition in programmes <p><u>Information Technology</u></p> <ul style="list-style-type: none">- be able to find and use good quality information from a variety of sources	<p>Help! What do these words mean?</p> <p>sequence - When doing anything in life it is important to complete things in the correct order; for example you'd need to boil the water in a kettle before pouring into your cup when making a cup of tea! In a program we have to control what happens and when it happens in order to produce correct results. A sequence helps us to ensure that things happen in the correct order.</p>
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<p><u>Digital Literacy</u> - be able to tell the difference between useful information with information that is less reliable</p>	<p>selection - When you choose part of something. For example, when you copy and paste text, the passage that you highlight to copy is called the selection.</p> <p>repetition - When part of a program repeats itself. For example, in animation you may repeat the movements of a character to make it look like it's moving along.</p>
<p>A Year 6 Rimrose Hope Computer Whiz will:</p>	<p>Help! What do these words mean?</p>
<p><u>Computer Science</u> - use variables to store, change and access information when using a programme</p> <p><u>Information Technology</u> - be able to use a range of software and digital devices to create their own programmes</p> <p><u>Digital Literacy</u> - use the internet, computers and other devices sensibly and efficiently</p>	<p>variables - A variable is a piece of information in a program that we want to store, but is able to change. It's like a box that we can keep information in. This information could be a number, and during the program we might change the initial number (for example as part of the scoring system in a game).</p> <p>programmes - A computer program is a collection of instructions designed to make a process simple, whether that be writing a Word document or connecting to a website. A computer program is written using programming language, which allows a computer scientist to teach a computer how to achieve a result.</p> <p>software - Software is created using a programming language and is the non-physical part of a computer. Software can be written once and sold multiple times, for instance Microsoft doesn't have to rebuild Microsoft Word every time they have a new customer, they just make a copy of the files they already have.</p>



