Useful websites

https://scratch.mit.edu/

https://www.bbc.co.uk/bitesize/subjects/zyhbwmn

https://lightbot.com/

https://www.tynker.com/

http://robozzle.com/

https://code.org/learn

https://checkio.org/

https://www.codemonkey.com/

The computing curriculum :

EYFS: Using simple ICT programmes or resources to communicate with each other, eg walkie-talkies, Use cameras with the children to capture feelings, Fine motor skills develop to use control pads and keyboards

Y1: Use programmable toys, film the steps of a recipe, Illustrating an eBook, finding images using the web, produce a talking book and create a card digitally.

Y2: Program a toy, explore how computer games work, take photographs, research a topic, collect clues, collect data about bugs

Y3: Program an animation, find and correct bugs in programs, video a performance, make a screencast presentation, communicating safely on the internet, collecting and analysing data.

Y4: Develop a game, prototype an interactive toy, produce digital music, Edit and wrote HTML, produce a wiki, present the weather.

Y5: Develop an interactive game, crack codes, fusing geometry and art, creating a website, creating a blog, creating virtual space.

Y6: Making a text-based adventure game, mastering algorithms, creating a TV advert, exploring computer networks, using media to document a trip, creating a yearbook/magazine.
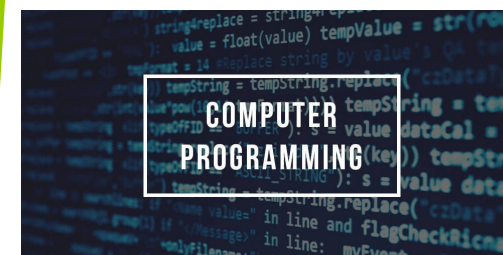
**The Meadows
Primary Academy**

The Meadows
Primary Academy

Help your child with Computer Programming at home

COMPUTER
PROGRAMMING

Updated April 2020

What is Computer Programming?

The curriculum for Computer Programming has been developed to equip children with the foundational skills, knowledge and understanding that they will need for the rest of their lives in an increasing technological world.

What is Computer Programming?

There are three aspects of the computing curriculum: information technology (IT), digital literacy (DL) and computer science (CS).

1. Using a computer to achieve goals, like being able to type, using a spreadsheet program, editing video, etc.
2. Understanding how to program a computer using a program, either to solve maths and science problems or to create interactive apps, games, and experiences.
3. Gaining a deep understanding of the science and engineering of computers, both on the hardware side and the software (algorithms).

Reasons why Computer Programming is beneficial:

It helps with school & academic performance

It helps with maths & logical problem solving

It helps with writing skills & creativity

It helps with confidence

It is fun

It isn't just about computers

It helps children with storytelling

Helping your child at home:

EYFS:

Encourage your child to recognise numbers, read the on/off switch and tell one sound from another. Help them to load DVDs and CDs. This will develop their curiosity and their skill with small movements. It also teaches children how to treat equipment correctly and with respect.

Help your child to investigate cause and effect' toys. E.g. if they press a button on a toy what does it do. Introduce interactive books e.g. a touch and feel book.

KS1:

It would be really beneficial if you could help your child to understand how to use a mouse and keyboard. As well as this, understanding instructions (algorithms) and problem solving is an essential skill .

Ideas to help:

- Give your child a set of instructions to follow

- Ask your child to solve simple problems around the house e.g. put something magnetic onto a bottle and ask your child to get it out using a magnet. Line up some objects from around your house that are similar and then put one object that is different, ask your child to explain which one is the odd one out and why.

These skills will help them progress onto coding within the curriculum. If your child is confident at the above then help them to create a sprite and background using the program 'scratch' there are tutorials of how to do this on the free website: https://scratch.mit.edu/

KS2:

Majority of the curriculum is taught through a programme called 'scratch' this is a free program. With Scratch, you can program your own interactive stories, games, and animations. It would help your child if they build on their skills from KS1 and had a go at the following:

- code a cartoon

- Create animations that talk

- Make a Game

There are video tutorials to show your child how to complete them: https://scratch.mit.edu/

Golden Rules

√ **Do** allow your child to access a computer, with supervision, to become familiar with technology

√ **Do** play lots of educational games

√ **Do** remember that your focussed attention will help your child.

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