# Computing terms

## **Algorithms**

An algorithm is a sequence of instructions or a set of rules to get something done. A recipe is an algorithm. Algorithms are written for a human, rather than for a computer, to understand.

## Programming

Programming is a set of commands given to control or instruct technology. These are written for a computer rather than a human to understand.

# Debug

When children have written a program, they will 'try it out' if it doesn't work the children will use trial and error to find a program that works. This process is called debugging.

# Computational Thinking

Computational thinking is about looking at a problem in a way that a computer can help us to solve it. This is a two-step process: First, we think about the steps needed to solve a problem. Then, we use our technical skills to get the computer working on the problem.

# E-Safety

Working with computers and the internet is great fun BUT we need to educate our children about the benefits and risks of using new technology and provide safeguards and awareness for pupils to enable them to control their online experiences. <a href="www.thinkuknow.co.uk">www.thinkuknow.co.uk</a> has some useful advice for parents.

Free educational websites to use at home: <a href="https://www.purplemash.com/www.oxfordowl.co.uk">www.oxfordowl.co.uk</a> <a href="https://www.topmarks.co.uk">www.topmarks.co.uk</a>

Please contact the following person for any additional information:

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# Moat Farm Infant school



# Information Leaflet for Parents and Carers



# What will children learn in the Early Years Foundation Stage?

## Children are taught to:

- Use technology including iPads, cameras and the Interactive White Board
- Show an interest in technological toys or real objects such as cameras or mobile phones through their role-play and choosing time.
- Make toys work by recording sounds or making them move or taking photographs.
- Understand that information can be retrieved from computers.
- Complete a simple program on a computer and use ageappropriate computer software and apps.
- Understand that a range of technology is used in places such as homes and schools.
- Understand what is meant by sensible 'screen time'

# What will children learn in Computing at Key Stage 1?

Children's experiences in Foundation Stage are built upon to enable children to apply computing in a range of lessons and contexts.

# Children are taught to:

- Understand what algorithms are; how they are implemented as programs on digital devices; and that programs are executed by following precise and unambiguous instructions.
- Create and debug simple programs.
- Use logical reasoning to predict the behaviour of simple programs.
- Use technology purposefully to create, organise, store, manipulate and retrieve digital content.
- Recognise common uses of information technology beyond school.
- Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.

## Purple Mash in school and at home

Purple Mash is a fantastic tool to practise the skills that we learn in computing.

We encourage children to learn their log in details as early as possible so that they can log on independently at school or at home. Children simply love using the activities on purple mash. The work that children do can be printed out or saved safely and securely online. This helps children to learn the process of naming, saving and reopening documents.

You can access Purple Mash from the link bellow.

# Purple Mash by 2Simple

We will set homework from time to time so that the children can explore the site and practise skills learnt in class.

Please speak to your child's teacher or Mrs Macdonald if you feel you would like any support using Purple Mash.