

Useful 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.

Our vision for computing

We believe that an exciting and stimulating computing curriculum, that incorporates technology, will create motivated, independent learners. We explicitly teach our children computing skills and technology that are then embedded in all areas of the curriculum. Children learn computing skills and apply them to be effective communicators, problem solvers and to know how to keep safe in an ever changing world.

Online safety

Working with computers and the internet is great fun but we are careful to educate our children and wider community about the benefits and risks of using technology and how we can maintain a healthy relationship with technology. We have our very own Stannington Stay Safe team to help us. Check out their videos on the school website to find out how you can stay safe too. www.thinkyouknow.co.uk has some useful advice for parents.

Feel free to contact the following person for any additional information:

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Children using bee bot toys to program and debug.



Stannington Infant School

Computing

Information Leaflet
for
Parents and Carers





What will our children learn in Foundation Stage?

They will:

recognise that a range of technology is used in places such as homes and schools. They select and use technology for particular purposes.

Children in Foundation Stage will enjoy 'tinkering time' to allow them to explore the way that we can control technology e.g. using remote control toys and pressing the buttons on our bee bot toys to help them to reach their target.

Children will begin to use technology for a specific purpose, like using a camera to take photographs or microphones to record or ipads to video.

They will have lots of fun learning through a range of different software and programmable toys.



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

Pupils will be taught to:

Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute 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

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 APptivities 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.



Please speak to your child's teacher or Mrs Greensmith if you feel you would like any support using purple mash.