# **Alton Infant School**

# Sowing the Seeds of Learning

# Computing Knowledge and Skills Progression

### **EYFS**



### Year 1



## Year 2



These skills are prerequisite skills ready for computing within the National Curriculum for Years 1 and 2.

## 3 – 4 year olds:

# Personal, Social and Emotional Development.

To remember (computing) rules without needing an adult to remind them.

#### **Physical Development.**

To match developing physical (fine motor computing skills) to tasks and activities.

#### **Understanding the World.**

To explore how things work.

# E- Safety:

Children can talk about why it is important to keep their password private and say what personal information is.

Children know that it is important to speak to an adult when they see something unexpected or worrying online. They have a growing awareness that not everyone is who they say they are on the internet.

They also know that they need to speak to an adult before using a new program or website.

# E- Safety

Children can explain why they need to keep a password and personal information private.

Children can describe the things that happen online that they must tell an adult about.

Children can talk about why it is important to be kind and polite online and in real life.

Children are aware that they know that not everyone is who they say they are on the internet. They understand that they must not talk

Reception.	Thou also agree to follow sonsible	to a trusted adult if the contacted
reception:	They also agree to follow sensible e-safety rules.	on-line by somebody unknown.
Personal, Social and Emotional	e-sarety rules.	
Development.		
To develop resilience and perseverance		
in the face of a challenge.		
To know and talk about the different		
factors that support overall health and		
well-being – e.g. sensible amounts of		
screen time (e-safety).		
Physical Development.		
Develop small motor skills in order to		
use a range of tools competently, safely		
and confidently.		
Expressive Arts and Design.		
Explore, use and refine a variety of		
artistic effects to express ideas and		
feelings.		
Early Learning Goal (ELG).		
Personal, Social and Emotional		
Development (Managing Self).		
To be confident to try new activities and		
show independence, resilience and		
perseverance in the face of challenge.		

Explain the reasons for rules, know right from wrong and try to behave accordingly (e-safety).	
Expressive Arts and Design (Creating with Materials). Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function.	

Algorithms and programming.
Children understand that an algorithm is a set of instructions used to solve a problem or achieve an objective. They know that an algorithm written for a computer is called a program.

Children can work out what is wrong with a simple algorithm when the steps are out of order and can write their own simple algorithm.

Children know that an unexpected outcome is due to the code they have created and can make logical attempts to fix the code.

Children can predict where a programmable toy will go and end up after inputting a simple algorithm.

Algorithms and programming.
Children can explain that an algorithm is a set of instructions to complete a task. When designing simple programs, children show an awareness of the need to be precise with their algorithms so that they can be successfully converted into an age-appropriate code.

Children can create a simple program that achieves a specific purpose. They can also identify and correct some errors. Children's program designs display a growing awareness of the need for logical, programmable steps.

Children can identify the parts of a program that respond to specific events and initiate specific actions. For example, they can write a cause-and-effect sentence of what will happen in a program.

<u>Information Technology and Digital</u> <u>Technology.</u>

Children understand what is meant by technology. They can identify a variety of examples both in and out of school.

Children can recognise common uses of information technology within the home and school. They can make a distinction between objects that use modern technology and those that do not e.g. a microwave vs. a chair.

Children are able to sort, collate, edit and store simple digital content e.g. children can name, save and retrieve their work and follow simple instructions to access online resources.

Children take ownership of their work and save this in their own private space such as their class folder.

<u>Information Technology and</u> <u>Digital Technology.</u>

Children can recognise common uses of information technology beyond home and school.

Children demonstrate an ability to organise simple digital information.

Children are confident when creating, naming, saving and retrieving content.

Children use a range of media in their digital content including photos, text and sound.

Children can effectively retrieve relevant, purposeful digital content using a search engine. They can apply their learning of effective searching beyond the classroom. They can then share this knowledge through and simple publishing programs.

Children make links between
technology they see around them
and the coding and multimedia
work they do in school e.g.
animations, interactive code and
programs.
Children know the implications of
inappropriate online searches.
Children begin to understand how
things are shared electronically
such as posting work to the Purple
Mash display board.