## **Subject: Computing**

<u>Intent:</u> Our intention is to enable all children to build a greater understanding of how digital programming works. They will become digitally literate – able to use, express themselves and develop ideas through information and communication technology. We want children to become fully aware of how to remain safe online through regular and comprehensive e-safety teaching and learning sessions.

We teach a curriculum that enables children to become effective users of technology who can:

- Understand and apply the essential principles and concepts of Computer Science, including logic, algorithms and data representation;
- Analyse problems in computational term, and have repeated practical experience of writing computer programs in order to solve such problems;
- Evaluate and apply information technology analytically to solve problems;
- Communicate ideas well by utilising appliances and devices throughout all areas of the curriculum.

## Internet Safety

Milton Abbot School takes internet safety extremely seriously. We have an E- Safety Policy that provides guidance for teachers and children about how to use the internet safely. Every year group participates in lessons on e-safety and children understand how to stay safe when using technology.

You may find the following links useful to help your child stay safe online at home: Understanding social networking sites and how to keep your children safe.  Great advice to help keep your children safe online.	Common sense media https://www.commonsensemedia.org  Think U Know https://www.thinkuknow.co.uk/
Safety information for the whole family.	Microsoft Protect <a href="https://support.microsoft.com/en-gb/hub/4099151/windows-security-help">https://support.microsoft.com/en-gb/hub/4099151/windows-security-help</a>
Report any illegal content on the internet.	Internet Watch <a href="https://www.iwf.org.uk">https://www.iwf.org.uk</a>
Keep up to date with any e-safety issues.	ChildNet https://www.childnet.com
Safety information for parents.	Safer Internet <a href="https://www.saferinternet.org.uk">https://www.saferinternet.org.uk</a>
Information on gaming safely with resources for parents and children.	Get Game Smart https://news.microsoft.com/2009/01/14/microsoft- encourages-families-to-get-game-smart/

Understand and share the world of social	Make it Secure
networking websites with your children.	https://www.nspcc.org.uk/keeping-children-safe/o
	nline-safety/

## Implementation:

As part of the planning process, teachers need to plan the following:

- A knowledge organiser which outlines knowledge (including vocabulary) all children must master;
- A cycle of lessons for each subject, which carefully plans for progression and depth;
- A low stakes quiz which is tested regularly to support learners' ability to block learning and increase space in the working memory;
- Challenge questions for pupils to apply their learning in a philosophical/open manner;
- Trips and visiting experts who will enhance the learning experience;

## Impact:

Our Computing curriculum is high quality, well thought out and is planned to demonstrate progression. If children are keeping up with the curriculum, they are deemed to be making good or better progress. In addition, we measure the impact of our curriculum through the following methods:

- A reflection on standards achieved against the planned outcomes
- Children can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation;
- Children can analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems;
- Children can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems;
- Children are responsible, competent, confident and creative users of information and communication technology.
- A celebration of learning for each term which demonstrates progression across the school;
- Tracking of gains in each quiz;
- Pupil discussions about their learning;