

Computer Science Action Plan 2020-21

Specific tasks INTENT	Strategies (who and when) IMPLEMENTATION	Monitoring (what, who and when?)	Success Criteria IMPACT
<p>To successfully deliver the computing curriculum to all key stages using a 2 year rolling program.</p> <p>The coverage will include these three areas of development;</p> <ol style="list-style-type: none"> <li>1. Computer science (CS)</li> <li>2. Digital literacy (DL)</li> <li>3. Information technology (IT)</li> </ol> <p>Esafety will be taught discreetly to each year group once each half term with a full day focus once a year. However, elements of Esafety will be included within the three main areas of development (CS IT DL).</p> <p>Note: CS will have the main focus while aspects of DL and IT will be included by the class teacher in Technology enhanced learning (TEL)</p> <p>Key stage 1 Pupils should be taught to:</p> <ul style="list-style-type: none"> <li>☑ understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions</li> <li>☑ create and debug simple programs</li> <li>☑ use logical reasoning to predict the behaviour of simple programs</li> <li>☑ use technology purposefully to create, organise, store, manipulate and retrieve digital content</li> <li>☑ recognise common uses of information technology beyond school</li> <li>☑ use technology safely and respectfully, keeping personal information private; identify where to go for</li> </ul>	<p>SC to complete a minimum of one session (1-2 hours) in each class every week of each term.</p> <p>SLT to support SC with the funding of Hardware and software needed to implement the computing curriculum to all year groups over a two year program.</p> <p>A minimum of an additional 12 iPads (minimum 64 GB capability). With the current iPad stock this would give the key stage enough iPads to teach the whole class at the same time. (However, 7 original iPads have now reached the stage that they can only operate at IOS 10 which will limit the amount of software they will be able to access in the future.)</p> <p>Each class to be allocated their own iPad to support their lessons and for behaviour management.</p> <p>A minimum of 15 Windows 10 touch screen laptop/tablet versions (i5 intel processing speed) this year and a repeat of this the following year (2020/2021). With current stock, this would enable whole class technology enhanced learning.</p>	<p>Monitoring by SLT:</p> <ul style="list-style-type: none"> <li>• Learning walks</li> <li>• Planning scrutiny</li> <li>• Pupil conferencing</li> <li>• Lesson observation</li> <li>• Evidence uploads on MS Teams learning platform.</li> </ul> <p>SC to monitor TEL within each class at the end of each term.</p> <p>Esafety committee meeting held with Digital Leaders every half term to discuss their progress and initiatives.</p>	<p>Children will be able to discuss and explain aspects of CS they have learnt at the end of each term.</p> <p>Children will show a clear progression between phases KS1, lower KS2 and upper KS2.</p> <p>Children will have a clear understanding of aspects of Esafety.</p>

help and support when they have concerns about content or contact on the internet or other online technologies.

Key stage 2

Pupils should be taught to:

- ☑ design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts
- ☑ use sequence, selection, and repetition in programs; work with variables and various forms of input and output
- ☑ use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs
- ☑ understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration
- ☑ use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content
- ☑ select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information
- ☑ use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.