

Cambridgeshire Progression in Computing Capability

E-safety:

Purpose of study ~ Computing programmes of study: Key stages 1 and 2

A high-quality computing education equips pupils to use computational thinking and creativity to understand and change the world. Computing has deep links with mathematics, science, and design and technology, and provides insights into both natural and artificial systems. The core of computing is computer science, in which pupils are taught the principles of information and computation, how digital systems work, and how to put this knowledge to use through programming.

Building on this knowledge and understanding, pupils are equipped to use information technology to create programs, systems and a range of content. Computing also ensures that pupils become digitally literate – able to use, and express themselves and develop their ideas through, information and communication technology – at a level suitable for the future workplace and as active participants in a digital world.

Aims:

The national curriculum for computing aims to ensure that all pupils:

- can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation
- can analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems
- can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems
- are responsible, competent, confident and creative users of information and communication technology.

Theme Overview: E-safety

"New technologies are integral to the lives of all children, young people and their parents. They inspire children to be creative, communicate and learn. It is essential that children and young people tap into the potential of the digital world if they are to enjoy their childhood and succeed in life. In educating children and young people we should empower them to learn how to use digital technology responsibly, not simply block what they can access. We must give them the information and skills they need to be digitally literate and savvy users. This enables them to take advantage of the opportunities that new technologies can offer, as well as being able to deal with any risks that arise."

Tanya Byron - 2009

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	Early Capability		Middle Capability		Later Capability	
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
National Curriculum	<ul style="list-style-type: none"> 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. 		<ul style="list-style-type: none"> Use technology safely, respectfully and responsibly; recognise acceptable / unacceptable behaviour; identify a range of ways to report concerns about content and contact. 			
Cambridgeshire Capability Statements	<p>Pupils understand that information about themselves may be personal and they can choose who to share it with.</p> <p>With support, pupils can manage can their online activity safely, recognising which information should be kept private. They can explain what it means to stay safe online and older pupils identify some of the potential risks associated with the online world.</p> <p>They communicate safely and respectfully using a range of digital devices, making links to their behaviour in the physical world.</p> <p>Pupils start to develop strategies for managing concerns about online content or contact; seeking help and support when needed.</p>		<p>Pupils, review their online activity, including maintaining amending online profiles, communication channels and publishing spaces to ensure they do not inadvertently reveal personal details.</p> <p>Pupils show respect for content created by others by acknowledging sources, commenting respectfully and responsibly on other people's work and respecting privacy. They are discriminating about what they share and whether any permission is needed to do so.</p> <p>Pupils can identify a range of potential online risks including inappropriate contact or content and can identify ways of seeking support and reporting concerns. They exercise caution when receiving attachments and following web links contained in messages.</p>		<p>Pupils continue to maintain, review and amend online identities, considering the potential impact of these on their digital footprint. They communicate in a wide variety of ways and pay careful attention to what details might be inadvertently revealed.</p> <p>They engage in an increasing range of online communities safely, respectfully and responsibly both with friends and the wider online community. With adult support, they actively consider and use safety and security settings on a range of digital devices.</p> <p>When using online resources and search technologies, pupils are increasingly discerning about what information they gather, checking the validity of data and showing due respect to privacy and copyright.</p> <p>Pupils can recognise a range of potential online risks, including inappropriate contact or content and can identify ways of seeking support and reporting concerns.</p>	

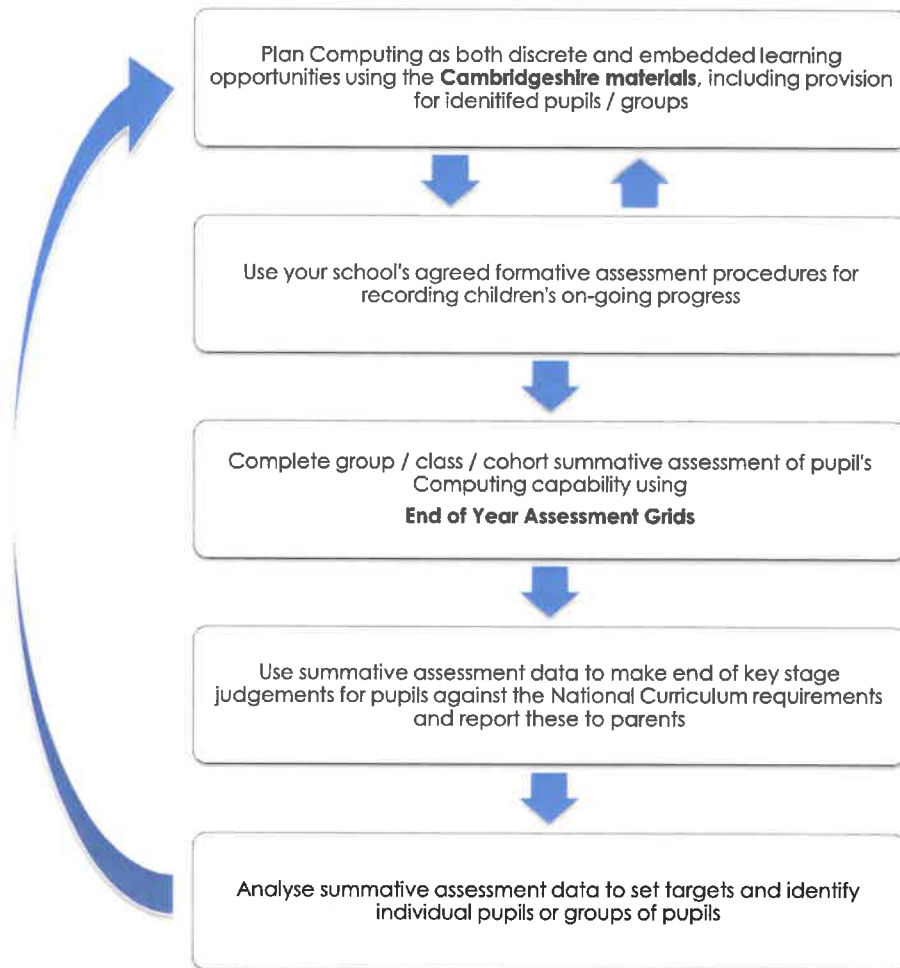
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	Early Capability		Middle Capability		Later Capability	
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Resource Description	<ul style="list-style-type: none"> ▪ Digiduck's Big Decision ▪ The Adventures of Smartie the Penguin ▪ Hector's World ▪ Lee and Kim ▪ The Smart Crew 		<ul style="list-style-type: none"> ▪ The Smart Crew ▪ CBBC Stay Safe ▪ CBBC Who do you share your details with? ▪ CBBC Don't Lie About Your Age Online ▪ CBBC Guy Fawkes - Internet Privacy Settings ▪ CBBC Saxon- Internet Videos are Forever 		<ul style="list-style-type: none"> ▪ Cybercafe ▪ Becky's 'Jigsaw' video (You Tube) ▪ CBBC Caught in the Web: ▪ CBBC Who Do You Share Your Details With ▪ Watch the Password Rap ▪ The Yo Zone in www.gridclub.com ▪ Your Call Quiz http://www.childnet.com/yourcall/ 	
<p>More detailed resources and activities can be found in Cambridgeshire's ACE (Accreditation of Competence in E-safety) scheme.</p>						
<p>NB - Further guidance and support can be found on the Cambridgeshire E-safety website – www.ccc-esafety.org.uk. The ICT Service also produce an age appropriate, e-safety curriculum (ACE) and provides a subscription-based, child friendly Learning Platform (Starz+). Contact the ICT Service on info@theictservice.org.uk for more information.</p>						
Example Activities (Plugged / unplugged)	<p>Pupils explore what is meant by 'identity' and take this into account when managing any online profiles. They test this out by creating a profile for a fictional character such as Snow White – what information should she share / not share? What would her online 'nickname' be?</p> <p>Teachers frequently model communicating online (e.g. messaging, blogging etc.) and emphasise e-safety messages. Create an agreed 'class code' which children sign and then follow to ensure they communicate safely, politely and respectfully at all times.</p>		<p>Pupils evaluate their own ongoing online profile and activity, thinking carefully about what it reveals about them. They frequently post in blogs and comment on other people's posts.</p> <p>When researching facts about Ancient Rome (using age appropriate search engines), pupils check the value of websites, acknowledge sources by including them in their presentations as footnotes or alongside pictures.</p>		<p>Pupils continue with work on protecting their online identity but extend this to the wider online community, perhaps by signing up to useful educational sites such as Scratch.</p> <p>Schools must bear in mind the need to carry out risk assessments for this level of activity and ensure parents are aware of the benefits and risks.</p> <p>Pupils explore and articulate their understanding of how to stay safe online by giving advice to younger children or relatives e.g. by making posters, leaflets or advisory videos.</p>	

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In September 2012, the DfE disapplied the 'Programmes of Study, associated attainment targets and statutory assessment arrangements for ICT'. Cambridgeshire suggests the following approach to assessing Computing capability and we will continue to update our guidance as further information is available nationally.

The Assessment Process:



The DfE document '**Primary assessment and accountability under the new national curriculum**' (July 2013) clearly states that 'schools will be able to introduce their own approaches to formative assessment'. Whichever approach schools choose to adopt, appropriate, targeted questioning should continue to form an essential part of the assessment process in helping pupils to articulate their learning. The following sample questions and statements are designed to support teachers in using effective, open ended questions to collect evidence about what their pupils have learned.

