Year 3 Computing Planning

Term & Focus	National Curriculum Objectives	Notes for Teachers	Sample Activities
Autumn (1) *E-Safety & Core Skills*	*Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.* **Use search technologies effectively**, appreciate how results are selected and ranked, and be discerning in evaluating digital content.	Includes topics such as password security, age restrictions, spamming, 'netiquette' and cyber bullying. This builds on skills learned in KS1 and also places an emphasis on *responsible* use of technology. Pupils need to consider how their online actions impact on other people. They need to be aware of their legal and ethical responsibilities, such as showing respect for intellectual property rights of music, movies, photographs and written work. They should be aware of the terms and conditions of websites that they use (e.g. 13+ for Facebook). In addition to reporting concerns to an adult KS2 pupils should also be made aware of services such as CEOP, Childline etc.	Recap from KS1 on **the importance of creating strong passwords and keeping them secret.** Core focus for lower KS2 is on **the advantages of joining only age-appropriate websites.** Create a page (fictitious person, maybe a superhero) for a social media website (Facebook style). What information would you include? What information should you not display? Why do you think that websites such as Facebook have an age limit of 13? Think about the layout and design of the page, combining images, text and other media in a visually effective way. **Core Skills** **Word Processing (digital input) -** Development of appropriate word processing skills. Input of and formatting of text. ***'2Type'***

			('Teaching Keys' and 'Falling Letters') on PurpleMash website. Children to be introduced to correct fingers positions when typing. **<u>Internet Skills (Searching)</u>** Use search engine (e.g. Google). Pupils to use 'image' tab to search for pictures. Introduce the more advance skills of different size and types of images (e.g. colour, black and white and transparent backgrounds). **<u>Social Media Updates</u>** Introduce children to the concept of social media updates and having responsibility for what they post online (digital footprint). 'Lesson in a Tweet' give children 14x10 grid and ask them to prepare a Tweet for publication.
Autumn (2) *Digital Literacy & ICT* **+ Independent Learning Lessons**	*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*	This brings together various aspects of the computing curriculum. **Pupils should demonstrate progression by:** • *Using software under the control of the teacher.* • *Using the software with*	**<u>Celts & Plants and Animals</u>** ***'Moldiv'*** app - Collage of plants or animals. Children to develop digital photography skills (pinch and zoom etc) and to add various effects and text to their collages. ***'Educreations'*** app - Pupils to make

	presenting data and information. *** This is the key computing objective and it is expected that this will be the focus in approximately 70% of lessons.**	*increasing independence.* • *Combining software with other programs and applications.* • *Selecting software themselves, appropriate to the task and the topic.* At KS2 think of data as text, images, audio, video recordings etc (although it is worth noting ahead of KS3 that all of this information is still digitised - represented in the form of numbers too).	spoken multimedia presentation about the Celts. ***'Celtic Shield'*** on PurpleMash website. Children to use textured paints to create their own Celtic shield. ***'Celtic Village'*** postcard activity on PurpleMash. Children to write a postcard as if they had spent time in a Celtic village. Use ***'2Graph'*** on PurpleMash to create a pictogram of class pets.
Spring (1) *Computer Science*	*Design, write and debug programs that accomplish specific goals* *Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs*	Build up to using a variety of programming languages. The focus on algorithms at KS1 leads pupils into the design stage of programming at KS2. *Algorithms identify the steps needed to solve any problem*. **Algorithm** - *A procedure or step-by-step guide to solve a problem or achieve a particular objective.* KS2 pupils should be able to explain the thinking behind their algorithms, talking through the steps and explaining why they've	Physical instructions in both the classroom and larger areas such as school hall and playground. Recap on KS1 activities (introduce during 2014/15) Use of laminated cards to sequence the correct and precise order of instructions (one below another). Build upon/introduce programming principles through ***'Kodable Class'*** app.

		solved a problem the way they have. Pupils are also expected to look at someone else's algorithm and explain how it does what it does. Thinking algorithmically allows pupils to debug code, rather than just adopt a trial-and-error approach.	Progression to ***'2Code'*** (Purple Mash). Pupils will need to start at an introductory level (KS1 objectives) on activities from 'Chimp' section, so that they fully understand the basics.
Spring (2) *Digital Literacy & ICT* **+Independent Learning Lessons**	*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.* *** This is the key computing objective and it is expected that this will be the focus in approximately 70% of lessons.**	This brings together various aspects of the computing curriculum. **Pupils should demonstrate progression by:** • *Using software under the control of the teacher.* • *Using the software with increasing independence.* • *Combining software with other programs and applications.* • *Selecting software themselves, appropriate to the task and the topic.* At KS2 think of data as text, images, audio, video recordings etc (although it is worth noting ahead of KS3 that all of this information is still digitised - represented in the form of numbers too).	***'Videolicious'*** app children make documentary movie about the Romans. Telling a story through photos found from the Internet. Link back to 'Core Skills' of searching Internet for images. ***'Roman'*** MashCam on PurpleMash website. Children to add their own face to that of a Roman. Describe their feelings experiences etc either through text input or through use of voice recording. ***'Roman Mosaic'*** art activities on PurpleMash website. ***'Comic Life 3'***. Pupils to make their own comic strip of the story of Romulus and Remus. ***'Hadrian's Wall - Virtual 3D Tour'*** app. Explore the wall. Link to other Literacy activities etc.

			'MorfoBooth' app Julius Caesar or other significant Roman character. Explain attempted invasion. Various literacy activities linked to the Romans on PurpleMash.
Summer (1) *Digital Literacy & ICT*	*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.* *** This is the key computing objective and it is expected that this will be the focus in approximately 70% of lessons.**	This brings together various aspects of the computing curriculum. **Pupils should demonstrate progression by:** • *Using software under the control of the teacher.* • *Using the software with increasing independence.* • *Combining software with other programs and applications.* • *Selecting software themselves, appropriate to the task and the topic.* At KS2 think of data as text, images, audio, video recordings etc (although it is worth noting ahead of KS3 that all of this information is still digitised - represented in the form of numbers too).	**<u>Anglo Saxons and Vikings</u>** Wide variety of both 'Anglo Saxon' and 'Vikings' digital literacy activities on PurpleMash website. Also own digital literacy activities linked to topic through use of ***'2PublishExtra'*** on PurpleMash. ***'Educreations'*** and ***'Videolicious'*** for multimedia presentations linked to topic. ***'2Investigate'*** to make a database of various Vikings.
Summer (2) *Digital Literacy & ICT*	*Select, use and combine a variety of software (including internet*	This brings together various aspects of the computing	***'2Sequence'*** on PurpleMash website. Children create a piece of

+Independent Learning Lessons	*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.* *** This is the key computing objective and it is expected that this will be the focus in approximately 70% of lessons.**	curriculum. **Pupils should demonstrate progression by:** • *Using software under the control of the teacher.* • *Using the software with increasing independence.* • *Combining software with other programs and applications.* • *Selecting software themselves, appropriate to the task and the topic.* At KS2 think of data as text, images, audio, video recordings etc (although it is worth noting ahead of KS3 that all of this information is still digitised - represented in the form of numbers too).	music with a marching beat that could be used by the invading Viking army. Children to use the camera and video camera facilities within the iPad to make a television programme demonstrating their knowledge and understanding of the topics covered. Can take photographs of their artwork etc. Images can be combined using pic collage apps such as ***'Moldiv'*** etc. Recap on computer programming skills using apps and programs used during Spring (1). Link to route taken by the Viking and Anglo Saxon invaders.