

Computing Y5/6 2020.21

Key Threshold Concepts

Computing and online safety are vital life skills which run throughout our curriculum and not just in discrete computing lessons. Through the use of our class mobile technologies, our children use a range of applications, operating systems and devices to help become proficient, safe, responsible and creative users of technology, software and online systems.

Coding		Collect		Communicate		Connect (Online Safety) Ongoing skills					
<ul style="list-style-type: none"> To use IF / WHEN/ BASIC REPETITION conditions for movements. Specify types of rotation giving the number of degrees. To change the position of objects between screen layers (send to back, bring to front). To upload sounds from a file and edit them. Add effects such as fade in and out and control their implementation. To use IF THEN ELSE conditions to control events or objects. To use a range of sensing tools to control events or actions. To use lists to create a set of variables. To use a range of coding and computing skills to make own content. 		<ul style="list-style-type: none"> To select appropriate applications to devise, construct and manipulate data and present it in an effective and professional manner including using spreadsheets (using formulae), databases and graphing tools. To collect live data using data-logging equipment identifying data errors, patterns and sequences. 		<ul style="list-style-type: none"> To be able to choose the most suitable application or device for the purpose of communication. To use many advanced features in software in order to create high quality, professional or efficient communications. To create presentations with range of links, images and sounds. To manipulate images. To design own webpage. To undertake film making; including scripting, roles, rehearsal, evaluation, quality of shots, appropriateness of sound, saving to different media 		<ul style="list-style-type: none"> To collaborate with others online on sites approved and moderated by teachers. To understand how simple networks are setup and used. To understand more of the dangers online, how to minimise risks and report problems. To understand about legal and illegal downloads. To know what a positive digital footprint is and how to maintain one. To know how to be a 'critical consumer' online. To understand the effects of cyber-bullying. To know how to respect yourself and others online. 					
We are safe online		We are scientific programmers		We are statisticians		We are game designers		We are presenters		We are film makers	
Overview of the unit											
Chn will learn how to stay safe online. This will include: messaging, consent and responsibility, what are online crimes, pressure online, keeping safe when vlogging. They will then create a leaflet / presentation to share with Y4 pupils and KS2 parents.		Chn will program the microbit to create a light sensor. This can be used in science and compare the effectiveness with the data loggers. They will then create an alarm that can be incorporated into their DT project.		Chn are introduced to the numbers app. They will learn how to use formulae to calculate. Link the spreadsheet to their athletics unit where they can calculate the average distances, times, rank times/distances in order etc. They can also use to prep for the burger making even, calculating the cost of items and average cost per portion.		Chn will explore the online games flappy bird and alternatives before using block code to design and create their own game. They will work through the stages – analysis, design, implementation, testing, evaluation.		Chn will use keynote to produce a presentation linked to their geography unit "Is a hurricane the most deadly natural disaster?" They will incorporate a contents page with links to parts within the documents, and add links to specific parts of images which allow the reader to gain more information about a specific part of the image. Chn will use a consistent theme throughout. Chn will also create their own web page using Google sites and link this to their keynote presentation.		Chn will use iMovie to present their findings about the impact of WW2 on families in UK and India. Chn will use DoInk to record 1 st hand account using green screen technology. Chn will write and rehearse scripts to share the experiences of WW2. Children to edit and combine all groups films to show a range of experiences from WW2. Chn use appropriate transitions etc as they merge the films in iMovie.	

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Key Knowledge					
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Supportive Materials					
<p>Phone messaging https://drive.google.com/drive/folders/4JYZQEea_Sls9cVFlwd-SEeN40X6L-Qp What does it mean? https://drive.google.com/drive/folders/1z8HKf-GfriFQk5d_JEdYv623wqr388W What is consent? https://drive.google.com/drive/folders/1RHY0pJk8B0px0tKwtQqxwVs1EMLCijq1 Online peer pressure / grooming https://drive.google.com/drive/folders/1M4L-Ab7N625kjEXA6BXpP0wVqyIPU_mb Vlogging safety https://drive.google.com/drive/folders/1bxUbh2NjzdyZ1kTIKVKcNWBpQSenkH82 Password safety concept cartoons to discuss/respond to https://drive.google.com/drive/folders/1ZPC0iNowHCuMUN0J5S4ErEPaVtWYEhcM</p>	<p>Basic programming https://drive.google.com/drive/folders/1H9mbSxF3PjZxGarwzDvr8cKwITRPN2Ha Light Sensor https://microbit.org/projects/make-it-code-it/sunlight-sensor/ Alarm https://microbit.org/news/2020-05-18/microbit-at-home-door-alarm/</p>	<p>Spreadsheet tasks https://drive.google.com/drive/folders/1sOPp3cCo0_S4I4WGv6laRLeY6A-K9-Uj</p>	<p>Password: https://online.espresso.co.uk username: student27377 password: gooseacre</p> <p>Flappy bird game https://studio.code.org/flappy/1</p> <p>Alternative games to experience https://app.codemonkey.com/hour-of-code/game-builder/course#1 https://robotmagic.org/magic/l_bluepen38_1_1</p> <p>Activity to support LA https://central.espresso.co.uk/espresso/coding/unit.html#/unit6s/lesson1</p> <p>Planning Support https://drive.google.com/drive/folders/1mU5IPdM6UsCLOWRDSZ_sdN7-lrFzCwUA</p>	<p>Keynote support and success criteria https://drive.google.com/drive/folders/1R1v11IICDor0DMJtIKDPJ02uDp4hgKnv</p> <p>Using google sites Link</p>	<p>DoInk instructions http://www.doink.com/tutorials</p>

Vocabulary

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