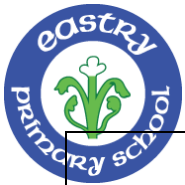


EASTRY C OF E PRIMARY SCHOOL KNOWLEDGE ORGANISERS

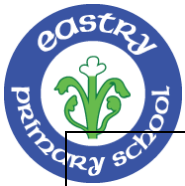


YEAR GROUP	6
SUBJECT	Computing
KEY VOCABULARY	algorithm, logical, coding, test, debug, sequence, selection, repetition, variables ,outputs, inputs, internet, World Wide Web, WAN, LAN, filters, digital, online, creator, technology, privacy, settings
END POINTS KNOWLEDGE <u>STRAND</u> Digital literacy Computer science Information technology	<p>I know how to design a playable game with a timer and a score.</p> <p>I know how to plan and use selection and variables. I understand how the launch command works. I know what functions and understand why they are useful. I understand how functions are created and called. I know how to use flowcharts to create and debug code. I know how to create a simulation of a room in which devices can be controlled. I know how to understand how user input can be used in a program. I know how to understand how 2Code can be used to make a text-adventure game</p> <p>I can identify benefits and risks of mobile devices broadcasting the location of the user/device. I can identify secure sites by looking for privacy seals of approval. I know the benefits and risks of giving personal information. I know the meaning of a digital footprint. I have a clear idea of appropriate online behaviour. I understand the importance of balancing game and screen time with other parts of their lives. I know the positive and negative influences of technology on health and the environment.</p> <p>I know how to use a spreadsheet to investigate the probability of the results of throwing many dice. I know how to use a spreadsheet to calculate the discount and final prices in a sale. I know how to use a spreadsheet to plan how to spend pocket money and the effect of saving money. I know how to use a spreadsheet to plan a school charity day to maximise the money donated to charity.</p> <p>I know the purpose of writing a blog. I know the features of a successful blog. I know the theme and content for a blog. I understand how to write a blog and a blog post. I consider the effect upon the audience of changing the visual properties of the blog. I know how to contribute to an existing blog. I know how and why blog posts are approved by the teacher. I understand the importance of commenting on blogs to find out what a text adventure is. I know how to use 2Connect to plan a story adventure. I know how to make a story-based adventure using 2Create a Story. I know how to introduce an alternative model for a text adventure which has a less sequential narrative. I know how to use written plans to code a map based adventure in 2Code. I know what a LAN and a WAN are. I know how the Internet is accessed in school.</p>



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	<p>I know how to create a picture quiz for young children. I know how to learn how to use the question types within 2Quiz. I know how to make a quiz that requires the player to search a database. I know how to make a quiz to test your teachers or parents.</p> <p>To examine how whole numbers are used as the basis for representing all types of data in digital systems. I am beginning to recognise that digital systems represent all types of data using number codes that ultimately are patterns of 1s and 0s (called binary digits, which is why they are called digital systems). I am beginning to understand that binary represents numbers using 1s and 0s and these represent the on and off electrical states respectively in hardware and robotics.</p> <p>I know what a spreadsheet looks like. I know how to navigate and enter data into cells. I know how to introduce some basic data formulae for percentages, averages and max and min numbers. I know how the use of spreadsheets can save time and effort when performing calculations. I know how to use a spreadsheet to model a situation. I know how to demonstrate how a spreadsheet can make complex data clear by manipulating the way it is presented. I know how to create a variety of graphs in sheets. I know how to apply spreadsheet skills to solving problems. I know how to introduce some basic data formulae in Excel for percentages, averages and max and min numbers. I know how to demonstrate how the use of Excel can save time and effort when performing calculations. I know how to demonstrate how Excel can make complex data clear by manipulating the way it is presented. I know how to create a variety of graphs in Excel.</p>
<p>IT HELPS IF I ALREADY KNOW</p>	<p>I am beginning to simplify code.</p> <p>I know how to create a playable game.</p> <p>I am beginning to understand what a simulation is.</p> <p>I know how to program a simulation using 2Code.</p> <p>I know what decomposition and abstraction are in computer science.</p> <p>I know how to take a real-life situation, decompose it and think about the level of abstraction.</p> <p>I know how to use friction in code.</p> <p>I am beginning to understand what a function is and how functions work in code.</p> <p>I know what the different variables types are and how they are used differently.</p> <p>I know how to create a string.</p> <p>I understand what concatenation is and how it works.</p> <p>I know how to use formulae within a spreadsheet to convert measurements of length and distance.</p> <p>I know how to use the count tool to answer hypotheses about common letters in use.</p> <p>I know how to use a spreadsheet to model a real-life problem.</p> <p>I know how to use formulae to calculate area and perimeter of shapes.</p> <p>I know how to create formulae that use text variables</p>



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I know how to use a spreadsheet to help plan for next cake sale.

I know how to search for information in a database.

I know how to contribute to a class database.

I know how to create a database around a chosen topic.

I know how to plan a game

I know how to design and create the game environment.

I know how to design and create the game quest.

I know finish and share the game.

I know how to self and peer evaluate.

I am becoming familiar with 2Design and Make and the skills of computer aided design.

I know how to explore the effect of moving points when designing.

I know how to design a 3D Model to fit certain criteria

I know how to refine and print a model.

I know the need for visual representation when generating and discussing complex ideas.

I know the uses of a 'concept map'.

I understand and use the correct vocabulary when creating a concept map.

I know to create a concept map & how it can be used to retell stories and information

I know how to create a collaborative concept map and present this to an audience.

I know what a word processing tool is for.

I know how to add and edit images to a word document.

I know how to use word wrap with images and text.

I know how to change the look of text within a document.

I know how to add features to a document to enhance its look and usability.

I know how to use the sharing capabilities in Google Docs.

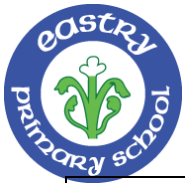
I know use tables within to present information.

I am becoming familiar with templates.

I know how to use tables within MS Word to present information

I am beginning to consider page layout including heading and columns.

E-Safety



EASTRY C OF E PRIMARY SCHOOL KNOWLEDGE ORGANISERS



I can demonstrate responsible choices about my online identity, depending on context.

I know that there are some people I communicate with online who may want to do me or my friends harm. I can recognise that this is not my/our fault.

I can make positive contributions and be part of online communities.

I know some of the communities in which I am involved and describe how I collaborate with others positively.

I know how to search for information about an individual online and create a summary report of the information I find.

I know ways that information about people online can be used by others to make judgments about an individual.

I know when someone is upset, hurt or angry online.

I know how to get help for someone that is being bullied online and assess when I need to do or say something or tell someone.

I know how to block abusive users.

I know how to use different search technologies

I know how to evaluate digital content and can explain how I make choices from search results.

I know key concepts including: data, information, fact, opinion belief, true, false, valid, reliable and evidence.

I know ways technology can affect healthy sleep and can describe some of the issues.

I know some strategies, tips or advice to promote healthy sleep with regards to technology.

I know how to create and use strong and secure passwords.

I know how many free apps or services may read and share my private information (e.g. friends, contacts, likes, images, videos, voice, messages, geolocation) with others.

I know how and why some apps may request or take payment for additional content (e.g. in-app purchases) and explain why I should seek permission from a trusted adult before purchasing.

I can assess and justify when it is acceptable to use the work of others.

I know how to give examples of content that is permitted to be reused.