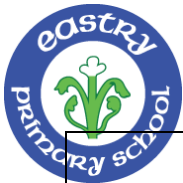


EASTRY C OF E PRIMARY SCHOOL KNOWLEDGE ORGANISERS



YEAR GROUP	4		
SUBJECT	Computing		
KEY VOCABULARY	Code block, Co-ordinates, execute, flow chart, IF, number variable, prompt, timer, variable value, Logo, RT, FD, LT, BK, Repeat,	Average function, advance mode, copy & paste, equals tool, formula random tool, move cell tool, timer, font, bold, italic, underline, Animation, onion skinning, frame, stop motion, video clip Motherboard, CPU, RAM, graphics card, network card, monitor, speaker, keyboard, mouse	See E safety
END POINTS KNOWLEDGE Computer science Information technology Digital literacy	<p>I am beginning to understand selection in computer programming.</p> <p>I know how to use co-ordinates in computer programming.</p> <p>I know how to use the 'repeat until' command.</p> <p>I know how an IF/ELSE statement works. I am beginning to explain 'if statements'</p> <p>I understand what a variable is in programming.</p> <p>I know how to use a number variable.</p> <p>I know how to create a playable game.</p> <p>I know how to format cells as currency, percentage, decimal to different decimal places or fraction.</p> <p>I know how to use the formula wizard to calculate averages.</p> <p>I know how to combine tools to make spreadsheet activities such as timed times tables tests.</p> <p>I know how to use a spreadsheet to model a real-life situation.</p> <p>I know how to add a formula to a cell to automatically make a calculation in that cell.</p> <p>I know how to explore how font size and style can affect the impact of a text.</p> <p>I know how to use a simulated scenario to produce a news report</p> <p>I am beginning to know the structure of the coding language of Logo.</p> <p>I know how to input simple instructions in Logo.</p> <p>I know how to use 2Logo to create letter shapes.</p> <p>I know how to use the Repeat function in Logo to create shapes</p> <p>I know how to use and build procedures in Logo</p>		



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I am beginning to know what a story is, an animated film or cartoon.

I am beginning to know how animations are created by hand.

I am beginning to know how animation can be created in a similar way using the computer.

I am beginning to learn about onion skinning in animation.

I am beginning to add backgrounds and sounds to animations.

I am beginning to be introduced to 'stop motion' animation.

I am beginning to know how to share animation on the class display board and by blogging.

I know how to locate information on the search results page.

I know how to use search effectively to find out information.

I know how to assess whether an information source is true and reliable.

I understand the different parts that make up a computer.

I know how to recall the different parts that make up a computer.

I know how to identify and discuss the main elements of music.

I know how to understand and experiment with rhythm and tempo.

I know how to create a melodic phrase.

I know how to electronically compose a piece of music.

E-safety

Self-image and identity

- I can explain how my online identity can be different to the identity I present in 'real life.'

I can describe the right decisions about how I interact with others and how others perceive me.

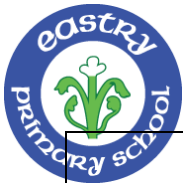
Online relationships

- I can describe strategies for safe and fun experiences in a range of online social environments.
- I can give examples of how to be respectful to others online.

Online reputation

- I can describe how others can find out information about me by looking online.
- I can explain ways that some of the information about me online could have been created, copied or shared by others.

Online bullying



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- I can identify some online technologies where bullying might take place.
- I can describe ways people can be bullied through a range of media (e.g. image, video, text, chat).
- I can explain why I need to think carefully about how content I post might affect others, their feelings and how it may affect how others feel about them (their reputation).

Managing online information

- I can analyse information and differentiate between 'opinions', 'beliefs' and 'facts'.
- I understand what criteria have to be met before something is a 'fact'.
- I can describe how I can search for information within a wide group of technologies (e.g. social media, image sites, video sites).
- I can describe some of the methods used to encourage people to buy things online (e.g. advertising offers; in-app purchases, pop-ups) and can recognise some of these when they appear online.
- I can explain why lots of people sharing the same opinions or beliefs online does not make those opinions or beliefs true.

Health, wellbeing and lifestyle

- I can explain how using technology can distract me from other things I might do or should be doing.
- I can identify times or situations when I might need to limit the amount of time I use technology.
- I can suggest strategies to help me limit this time.

Privacy and security

- I can explain what a strong password is.
- I can describe strategies for keeping my personal information private, depending on context.
- I can explain that others online can pretend to be me or other people, including my friends.
- I can suggest reasons why they might do this.
- I can explain how internet use can be monitored.

Copywrite and ownership

- When searching on the internet for content to use, I can explain why I need to consider who owns it and whether I have the right to reuse it.
- I can give some simple examples.

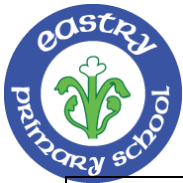


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IT HELPS IF I ALREADY KNOW

I know what a flowchart is and how flowcharts are used in computer programming.
I understand that there are different types of timers and select the right type for purpose.
I know how to use the repeat command.
I know the importance of nesting.
I know how to design and create an interactive scene.
I know how to use the symbols more than, less than and equal to, to compare values.
I know how to use 2Calculate to collect data and produce a variety of graphs.
I know how to use the advanced mode of 2Calculate to learn about cell references.
I know several ways to report unacceptable content and contact.
I know what is meant by the home, bottom, and top rows.
I have developed the ability to touch type the home, bottom, and top rows.
I know how to use two hands to type the letters on the keyboard.
I know how to touch type using the left & right hand
I am beginning to think about different methods of communication.
I am beginning to know how to open and respond to an email using an address book.
I know how to use email safely.
I (beginning to) know how to add an attachment to an email.
I am beginning to explore a simulated email scenario.
I know how to sort objects using just 'yes' or 'no' questions.
I know how yo complete a branching database using 2Question. (of the children's choice)
I am beginning to know what simulations are & explore/analyse & evaluate a simulation.
I know how to enter data into a graph and answer questions.
I know how to solve an investigation and present the results in graphic form.
I am beginning to understand the purpose of the Slides tool & add slides (& or) to presentations
I know how to format text appropriately.
I know how to add shapes and lines to enhance a presentation.
I know how to use the skills learnt to design and create an engaging presentation.
I know the uses of PowerPoint.
I know how to create a page in a presentation.
I know how to add media / animation / timings to a presentation.

E-Safety
I know how to explain what is meant by the term 'identity'.



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I know how to explain how I can represent myself in different ways online.

I know how to explain ways in which and why I might change my identity depending on what I am doing online (e.g. gaming; using an avatar; social media).

I know how to describe ways people who have similar likes and interests can get together online.

I know how to search for information about myself online.

I know how to explain what bullying is and can describe how people may bully others.

I know how to use key phrases in search engines.

I know how to explain why spending too much time using technology can sometimes have a negative impact on me; I can give some examples of activities where it is easy to spend a lot of time engaged (e.g. games, films, videos).

I know how to give reasons why I should only share information with people I choose to and can trust.

I know how to explain that if I am not sure or I feel pressured, I should ask a trusted adult.

I know how to explain why copying someone else's work from the internet without permission can cause problems.

I know how to give examples of technology- specific forms of communication (e.g. emojis, acronyms, text speak).

I know how to recognise I need to be careful before I share anything about myself or others online.

I know how to describe rules about how to behave online and how I follow them.

I know how to explain what autocomplete is and how to choose the best suggestion.

I know how to understand and can give reasons why passwords are important.

I know how I can give examples of what those problems might be.

I know how I can explain some risks of communicating online with others I don't know well.

I know who I should ask if I am not sure if I should put something online

I know how to explain how the internet can be used to sell and buy things.

I know how to describe simple strategies for creating and keeping passwords private.

I know how to explain why I should be careful who I trust online and what information I can trust them with. I know how to explain the difference between a 'belief', an 'opinion' and a 'fact'.

I know how to describe how connected devices can collect and share my information with others.

I know how to explain how my and other people's feelings can be hurt by what is said or written online.

I know how to explain why I can take back my trust in someone or something if I feel nervous, uncomfortable or worried.

I know how to explain what it means to 'know someone' online and why this might be different from knowing someone in real life.

I know how to explain what is meant by 'trusting someone online'. I can explain why this is different from 'liking someone online'.