

At Sheringham Community Primary School we aim to deliver a high-quality computing education to equip and prepare pupils for the digital world by unlocking their potential. Through teaching computing we equip our children to participate in a rapidly changing world. Computing skills are a major factor in enabling children to be confident, creative and independent learners and it is our intention that children have every opportunity available to allow them to achieve this.

Our curriculum will ensure our pupils are confident in 5 main areas: E-Safety, Programming, Handling Data, Multimedia and Technology in our Lives.

Pupils will be able to connect with others responsibly, use coding skills effectively, find, explore, analyse, exchange and present information and will be creative users of information and communication technology.

	Skills	Knowledge
N	<p><u>e-Safety</u></p> <ul style="list-style-type: none"> ● I can ask an adult when I want to use the internet ● I can be kind to my friends ● I am careful with technology devices <p><u>Programming</u></p> <ul style="list-style-type: none"> ● I can use simple software to make something happen ● I can make choices about the buttons and icons I press, touch or click on 	<p><u>e-Safety</u></p> <ul style="list-style-type: none"> ● To know the internet is a place I can find information ● I can name different types of devices eg computer, tablet and phone <p><u>Vocabulary</u> Internet, information, device, computer, tablet, phone</p> <p><u>Programming</u></p> <ul style="list-style-type: none"> ● To know the functions of the buttons on the IWB <p><u>Vocabulary</u> Button, press, touch, click, swipe</p>

Handling Data

- I can tell you about different kinds of information such as pictures, video, text and sound

Multimedia

- I can move objects on a screen
- I can create shapes on a screen
- I can use technology to show my learning

Technology in our Lives

- I can tell you about technology that is used at home and in school
- I can operate simple equipment
- I can use a safe part of the Internet to play and learn

Handling Data

- I know information can be shown in different forms eg pictures, videos, text, sound

Multimedia

- I know that holding an icon and dragging it will help me move it

Vocabulary

Hold, drag, object

Technology in our Lives

- I can name some of the technology that is used at home e.g. TV, tablet, phone, computer
- I know some safe programs

Vocabulary

Technology, television, camera, website

<p>R</p>	<p><u>e-Safety</u></p> <ul style="list-style-type: none"> ● I can ask an adult when I want to use the internet ● I can tell an adult when something worrying or unexpected happens when I am using the internet ● I can be kind to my friends ● I can talk about the time I spend using a computer/tablet/game device ● I am careful with technology devices <p>Use Jessie and Friends Resources from CEOP</p> <p>public\Staff Only\Subject Leader - ICT 2017\Curriculum\E Safety\Thinkuknow Jessie & Friends Resources</p> <p>Episode 1</p> <p><u>Programming</u></p> <ul style="list-style-type: none"> ● I can make a floor robot move ● I can use simple software to make something happen ● I can make choices about the buttons and icons I press, touch or click on <p><u>Handling Data</u></p> <ul style="list-style-type: none"> ● I can tell you about different kinds of information such as pictures, video, text and sound <p><u>Multimedia</u></p> <ul style="list-style-type: none"> ● I can move objects on a screen ● I can create shapes and text on a screen ● I can use technology to show my learning <p><u>Technology in our Lives</u></p> <ul style="list-style-type: none"> ● I can tell you about technology that is used at home and in school ● I can operate simple equipment ● I can use a safe part of the Internet to play and learn 	<p><u>e-Safety</u></p> <ul style="list-style-type: none"> ● To know the internet is a place I can find information ● To know examples of what something worrying looks like ● I can name different types of devices eg computer, tablet and phone <p><u>Vocabulary</u></p> <p>Internet, information, device, computer, tablet, phone.</p> <p><u>Programming</u></p> <ul style="list-style-type: none"> ● To know the functions of the buttons on the floor robot <p><u>Vocabulary</u></p> <p>Floor robot (Bee Bot), software, button, icon, press, touch, click, function</p> <p><u>Handling Data</u></p> <ul style="list-style-type: none"> ● I know information can be shown in different forms eg pictures, videos, text, sound <p><u>Multimedia</u></p> <ul style="list-style-type: none"> ● I know that holding an icon and dragging it will help me move it ● I know what text is <p><u>Vocabulary</u></p> <p>Hold, icon, drag, text, object</p> <p><u>Technology in our Lives</u></p> <ul style="list-style-type: none"> ● I can name some of the technology that is used at home e.g. TV, tablet, phone, computer ● I know some safe programs and websites I can use to learn <p><u>Vocabulary</u></p>
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		Technology, television, camera, program, website.
Y1	<p><u>e-Safety</u></p> <ul style="list-style-type: none"> • I can keep my password private • I can tell you what personal information is • I can tell an adult when I see something unexpected or worrying online • I can talk about why it's important to be kind and polite • I can recognise an age appropriate website • I can agree and follow sensible e- safety rules <p>Use Jessie and Friends Resources from CEOP</p> <p>public\Staff Only\Subject Leader - ICT 2017\Curriculum\E Safety\Thinkuknow Jessie & Friends Resources</p> <p>Episode 2</p> <p><u>Programming</u></p> <ul style="list-style-type: none"> • I can give instructions to my friend and follow their instructions to move around • I can describe what happens when I press buttons on a robot • I can press the buttons in the correct order to make my robot do what I want • I can describe what actions I will need to do to make something happen and begin to use the word 'algorithm' • I can begin to predict what will happen for a short sequence of instructions • I can begin to use software/apps to create movement and patterns on a screen • I can use the word 'debug' when I correct mistakes when I program <p>https://code.org/student/elementary Course A</p> <p>Discovery Espresso Coding 2.0 Level 1</p>	<p><u>e-Safety</u></p> <ul style="list-style-type: none"> • To know what a password is and why it is important to keep it safe • To know the term username • To know my personal information, eg name, address, age, phone number, school • To know some trusted adults I can report worrying things I might see on the internet • To know how to find the thinkuknow website and how report worrying things • To know some websites that are appropriate for my age <p><u>Vocabulary</u></p> <p>Internet, information, device, computer, tablet, phone. Password, username, personal information, age appropriate.</p> <p><u>Programming</u></p> <ul style="list-style-type: none"> • I know some simple instructional language eg Forwards, backwards, left and right • To know the functions of the buttons on the floor robot (From Yr R) • To know what an algorithm is (set of instructions) • To know the language software, hardware and application (app) • To know what debug means. (Identify and remove errors) <p><u>Vocabulary</u></p> <p>Floor robot (Bee Bot), software, button, icon, press, touch, click, function Forwards, backwards, left, right, function, software, hardware, application (app), algorithm, debug</p> <p><u>Handling Data</u></p> <ul style="list-style-type: none"> • I know information can be shown and collected in different

Handling Data

- I can talk about the different ways in which information can be shown.
- I can use technology to collect information, including photos, video and sound.
- I can sort different kinds of information and present it to others.
- I can add information to a pictogram and talk to you about what I have found out.

<https://primaryschoolict.com/pictograph/>

Multimedia

- I can be creative with different technology tools.
- I can use technology to create and present my ideas.
- I can use the keyboard or a word bank on my device to enter text.
- I can save information in a special place and retrieve it again.

Technology in our lives

- I can use hyperlinks to websites to find information.
- I can begin to identify some of the benefits of using technology.

forms eg pictures, videos, text, sound.

- I know the value of sorting information.

Vocabulary

Hold, icon, drag, text, object

Video, technology, information, sort, pictogram

Multimedia

- To know what a mouse is and its function
- To what a keyboard does
- To know what the save icon looks like.
- To know the difference between screen and a touch screen.

Vocabulary

Mouse, keyboard, tools, icon, screen, touch screen.

Technology in our Lives

- I can recognise the way we use technology in our classroom.
- I can recognise ways that technology is used in my home and community

Vocabulary

Technology, television, camera, program, website.

Hyperlink, technology,

Y2	<p><u>e-Safety</u></p> <ul style="list-style-type: none"> • I can explain why I need to keep my password and personal information private • I can describe the things that happen online that I must tell an adult about • I can talk about why I should go online for a short amount of time • I can talk about why it is important to be kind and polite online and in real life • I know that not everyone is who they say they are on the Internet <p>Use Jessie and Friends Resources from CEOP</p> <p>public\Staff Only\Subject Leader - ICT 2017\Curriculum\E Safety\Thinkuknow Jessie & Friends Resources Episode 3</p> <p><u>Programming</u></p> <ul style="list-style-type: none"> • I can give instructions to my friend (using forward, backward and turn) and physically follow their instructions • I can tell you the order I need to do things to make something happen and talk about this as an algorithm • I can program a robot or software to do a particular task • I can look at my friend's program and tell you what will happen • I can use programming software to make objects move • I can watch a program execute and spot where it goes wrong so that I can debug it <p>Discovery Espresso Coding 2.0 Level 2</p>	<p><u>e-Safety</u></p> <ul style="list-style-type: none"> • To know what a password is and why it is important to keep it safe • I know my username(s) and password(s) from memory • To know my personal information from memory, eg name, address, age, phone number, school • To know some trusted adults I can report worrying things I might see on the internet • To know how to find the thinkuknow website and how report worrying things • To know some websites that are appropriate for my age. • To know the age restrictions for some of the social media websites and games <p><u>Vocabulary</u></p> <p>Internet, information, device, computer, tablet, phone. Password, username, personal information, age appropriate. age restrictions, social media</p> <p><u>Programming</u></p> <ul style="list-style-type: none"> • I know some simple instructional language eg Forwards, backwards, turn. left and right • To know the functions of the buttons on the floor robot (From Yr R) • To know devices use algorithms to perform all tasks • To know that programs execute by following precise and unambiguous instructions • To know the language software, hardware and application (app) • To know what debug means. (Identify and remove errors) <p>What is an algorithm https://www.bbc.co.uk/bitesize/topics/zkcqn39/articles/zqrq7ty</p> <p><u>Vocabulary</u></p> <p>Floor robot (Bee Bot), software, button, icon, press, touch, click, function</p>

<https://code.org/student/elementary> Course B

Handling Data

- I talk about the different ways I use technology to collect information, including a camera, microscope or sound recorder
- I can make and save a chart or graph using the data I collect
- I can talk about the data that is shown in my chart or graph
- I am starting to understand a branching database
<https://www.j2e.com/jit5#branch>
- I can tell you what kind of information I could use to help me investigate a question

Multimedia

- I can use technology to organise and present my ideas in different ways.
- I can use the keyboard on my device to add, delete and space text for others to read.
- I can save and open files on the device I use.

Technology in our Lives

- I can tell you why I use technology in the classroom
- I can tell you why I use technology in my home and community
- I am starting to understand that other people have created the information I use
- I can identify benefits of using technology including finding

Forwards, backwards, left, right, function, software, hardware, application (app), algorithm, debug, execute, precise, unambiguous, instructions.

Handling Data

- I know that I can use software/websites to create graphs and charts
- I know the value of sorting information
- I know what a branching database is

Multimedia

- To know what a mouse is and its function
- To what a keyboard does including the function of backspace, the spacebar and shift keys
- To know what the save and open icons looks like

Vocabulary

Hold, icon, drag, text, object

Video, technology, information, sort, pictogram, Mouse, backspace, spacebar, shift, save, open.

Technology in our Lives

- To know why I use technology in the classroom
- To know why I use technology in my home and community
- To know that other people have created the information I use
- To know the differences between the internet and things in the physical world

	<p>information, creating and communicating</p> <ul style="list-style-type: none"> I can talk about the differences between the Internet and things in the physical world 	<p><u>Vocabulary</u></p> <p>Technology, television, camera, program, website</p> <p>Hyperlink, technology</p> <p>Communicating, physical world</p>
Y3	<p><u>e-Safety</u></p> <ul style="list-style-type: none"> I can talk about what makes a secure password and why they are important I can protect my personal information when I do different things online I can use the safety features of websites as well as reporting concerns to an adult I can recognise websites and games appropriate for my age I can make good choices about how long I spend online I ask an adult before downloading files and games from the Internet I can post positive comments online. <p>Use CEOP Play- Like- Share resources</p> <p><u>\public\Staff Only\Subject Leader - ICT 2017\Curriculum\E Safety\Play Like Share Resource Pack</u></p> <p><u>Programming</u></p>	<p><u>e-Safety</u></p> <ul style="list-style-type: none"> To know what a secure password is and why it is important to keep it safe. I know my username(s) and password(s) from memory. To know why I should not share my personal information on the internet. eg name, address, age, phone number, school. To know some trusted adults I can report worrying things I might see on the internet. To know how to find the thinkuknow website and how report worrying things. To know some general guidelines about how long I should spend using technology. To know why I should I ask an adult before downloading files of games from the internet. To know some websites that are appropriate for my age. I know what positive and negative comments look like and the consequences of posting online. To know the age restrictions for some of the social media websites and games. <p><u>Vocabulary</u></p> <p>Internet, information, device, computer, tablet, phone. Password, username, personal information, age appropriate. age restrictions, social media Guidelines, download, upload, comment, post, online.</p> <p><u>Programming</u></p> <ul style="list-style-type: none"> I know some simple instructional language e.g. forwards, backwards, turn. left and right, clockwise, anticlockwise, 90 degrees I know how to use block coding to achieve specific

- I can break an open-ended problem up into smaller parts
- I can put programming commands into a sequence to achieve a specific outcome
- I keep testing my program and can recognise when I need to debug it
- I can use repeat commands
- I can describe the algorithm I will need for a simple task
- I can detect a problem in an algorithm which could result in unsuccessful programming

<https://code.org/student/elementary> Course C

[Discovery Espresso Coding 2.0 Level 3](#)

Handling Data

- I can talk about the different ways data can be organised
- I can search a ready-made database to answer questions
- I can collect data help me answer a question
- I can add to a database. (Use 2 Investigate from 2simple)
- I can make a branching database

<https://www.j2e.com/jit5#branch>

Multimedia

outcomes

- I know how to shorten an algorithm using the repeat command
- I know how to test my program and how to debug it
- To know how to describe an algorithm that performs tasks
- To know that programs execute by following precise and unambiguous instructions
- To know the language software, hardware and application (app)

Vocabulary

Floor robot (Bee Bot), software, button, icon, press, touch, click, function

Forwards, backwards, left, right, function, software, hardware, application (app), algorithm, debug

execute, precise, unambiguous, instructions

clockwise, anticlockwise, 90 degrees, block coding, repeat, command

Handling Data

- I know that I can organise data in different ways eg table, database, graphs and charts
- I know how to use a database to answer questions
- I know the value of sorting information
- I know what a branching database is
- I know how to add information to a database

Vocabulary

Hold, icon, drag, text, object

Video, technology, information, sort, pictogram,

Mouse, backspace, spacebar, shift, save, open.

branching database, graph, table, chart, organising.

Multimedia

- To know what a mouse is and its function, including when to use the left and right buttons
- To what a keyboard does including the function of backspace, the spacebar and shift keys
- I know how to use the spellchecker and how to correct words

- I can create different effects with different technology tools
- I can combine a mixture of text, graphics and sound to share my ideas and learning
- I can use appropriate keyboard commands to amend text on my device, including making use of a spellchecker
- I can evaluate my work and improve its effectiveness
- I can snip, crop and resize pictures I copy

Technology in our Lives

- I can save and retrieve work on the Internet, the school network or my own device
- I can talk about the parts of a computer
- I can tell you ways to communicate with others online
- I can describe the World Wide Web as the part of the Internet that contains websites
- I can use search tools to find and use an appropriate website
- I think about whether I can use images that I find online in my own work

- I know how to combine text, graphics and sound in programs like Word and Powerpoint
- To know what the save and open icons looks like
- I know why it is important to crop and resize images

Vocabulary

Hold, icon, drag, text, object

Video, technology, information, sort, pictogram,

Mouse, backspace, spacebar, shift, save, open.

Left button, right button, spellchecker, combine, graphics, Word, Powerpoint. snip, crop, resize

Technology in our Lives

- I know how to save and retrieve information on the internet, school network and own device
- I know the different parts of a computer eg Monitor
- CPU (Central Processing Unit), Keyboard. Mouse Speakers, Printer
- I know ways I communicate with others online, email, in game chat, webcam, messaging service (facetime)
- I know what the World Wide Web is and who created it (Tim Berners-Lee)
- I know how to search the internet to find appropriate websites
- I understand some images/text/videos are copyright and should check before using in my own work

Vocabulary

Technology, television, camera, program, website.

Hyperlink, technology

Communicating, physical world.

Retrieve, network, World Wide Web, monitor, CPU, keyboard, mouse, speakers, printer, search, copyright.

Weblinks: What is the World Wide Web

<https://www.bbc.co.uk/bitesize/topics/zkcn39/articles/z2nbgk7>

Y4	<p><u>e-Safety</u></p> <ul style="list-style-type: none"> ● I choose a secure password and appropriate screen name when I am using a website ● I can talk about the ways I can protect myself and my friends from harm online ● I use the safety features of websites as well as reporting concerns to an adult ● I know that anything I share online can be seen by others ● I choose websites, apps and games that are appropriate for my age ● I can help my friends make good choices about the time they spend online ● I can talk about why I need to ask a trusted adult before downloading files and games from the Internet ● I comment positively and respectfully online and through text messages. <p>Use CEOP Jigsaw video resources public\Staff Only\Subject Leader - ICT 2017\Curriculum\E Safety\Jigsaw WMV</p>	<p><u>e-Safety</u></p> <ul style="list-style-type: none"> ● To know what a secure password and an appropriate screen name are and why it is important to keep it safe ● I know my username(s) and password(s) from memory ● To know why I should not share my personal information on the internet. eg name, address, age, phone number, school ● To know some trusted adults I can report worrying things I might see on the internet ● To know how to protect myself and friends from harm online ● To know how to find the thinkuknow website and how report worrying things ● To know some general guidelines about how long I should spend using technology ● To know why I should I ask an adult before downloading files of games from the internet ● To know some websites that are appropriate for my age ● I know what positive and negative comments look like and the consequences of posting online ● To know the age restrictions for some of the social media websites and games <p><u>Vocabulary</u> Internet, information, device, computer, tablet, phone. Password, username, personal information, age appropriate. age restrictions, social media Guidelines, download, upload, comment, post, online. Protect, harm</p>

Programming

- I can use logical thinking to solve an open-ended problem by breaking it up into smaller parts
- I can use an efficient procedure to simplify a program
- I can use a sensor to detect a change which can select an action within my program
- I know that I need to keep testing my program while I am putting it together
- I can use a variety of tools to create a program
- I can recognise an error in a program and debug it
- I recognise that an algorithm will help me to sequence more complex programs
- I recognise that using algorithms will also help solve problems in other learning such as Maths, Science and Design and Technology

<https://code.org/student/elementary> Course D

[Discovery Espresso Coding 2.0 Level 4](#)

Handling Data

- I can organise data in different ways
- I can collect data and identify where it could be inaccurate
- I can plan, create and search a database to answer questions
- I can choose the best way to present data to my friends

Programming

- I know some simple instructional language eg Forwards, backwards, turn. left and right, clockwise, anticlockwise, 90 degrees, 180 degrees, 270 degrees, 360 degrees, x and y coordinates on a grid
- I know how to use block coding to achieve specific outcomes
- I know how to shorten an algorithm using the repeat command
- I know how sensors work and how to use them in a program (Sound sensor on Scratch, motion, light and tilt sensors on Lego WeDO and Mbots)
- I know how to test my program and how to debug it
- To know how to describe an algorithm that performs tasks
- To know that programs execute by following precise and unambiguous instructions
- To know the language software, hardware and application (app)

Vocabulary

Floor robot (Bee Bot, M Bot), software, button, icon, press, touch, click, function

Forwards, backwards, left, right, function, software, hardware, application (app), algorithm, debug.

execute, precise, unambiguous, instructions.

clockwise, anticlockwise, 90 degrees, block coding, repeat, command

180 degrees. 270 degrees, 360 degrees, sensor, outcomes, x and y coordinates

Debugging:<https://www.bbc.co.uk/bitesize/topics/zkcqn39/articles/ztkx6sg>

Handling Data

- I know that I can organise data in different ways eg table, database, graphs and charts
- I know how to collect data and identify inaccurate sources of information
- I know how to create and search a database to answer questions
- I know how to present my data effectively according to the audience

Use 2 Investigate from 2simple

Multimedia

- I can use photos, video and sound to create an atmosphere when presenting to different audiences
- I can change the appearance of text to increase its effectiveness eg choosing an effective font, size and colour
- I can create, modify and present documents for a particular purpose
- I can use a keyboard confidently and make use of a spellchecker to write and review my work
- I can use an appropriate tool to share my work and collaborate online
- I can give constructive feedback to my friends to help them improve their work and refine my own work
- I can snip, crop and resize pictures I copy

Technology in our Lives

- I can tell you whether a resource I am using is on the Internet, the school network or my own device
Barefoot Plans - see Staff Only\Subject Leader - ICT 2017\Curriculum\Technology in our lives\Network Hunt
- I can identify key words to use when searching safely on the World Wide Web

Vocabulary

Hold, icon, drag, text, object
Video, technology, information, sort, pictogram,
Mouse, backspace, spacebar, shift, save, open.
branching database, graph, table, chart, organising.
Audience, present, search

Multimedia

- To know what a mouse is and its function. including when to use the left and right buttons and the scroll wheel
- To what a keyboard does including the function of backspace, the spacebar, shift, tab keys
- I know how to use the spellchecker and how to correct words
- I know how to combine text, graphics and sound in programs like Word and Powerpoint
- I know the importance of creating a coherent style throughout a document eg same font
- To know what the save and open icons looks like
- I know how to share my work and collaborate online using g-suite

Vocabulary

Hold, icon, drag, text, object
Video, technology, information, sort, pictogram,
Mouse, backspace, spacebar, shift, save, open.
Left button, right button, spellchecker, combine, graphics, Word,
Powerpoint, snip, crop, resize
Coherent, style, font, document, increase, decrease, tab, modify,
purpose.

Technology in our Lives

- I know whether a resource I am using is on the internet, school network and own device
- I know how to search the internet using key words to find appropriate websites
- I know to check the reliability of information found online
- I understand some images/text/videos are copyright and should check before using in my own work
- I know what a hyperlink is and how to create a link to a

	<ul style="list-style-type: none"> ● I think about the reliability of information I read on the World Wide Web ● I can tell you how to check who owns photos, text and clipart ● I can create a hyperlink to a resource on the World Wide Web ● I can recognise that websites use different methods to advertise products 	<p>resource online</p> <ul style="list-style-type: none"> ● I know that websites use different methods to advertise products and the reasons why <p><u>Vocabulary</u> Technology, television, camera, program, website. Hyperlink, technology Communicating, physical world. Retrieve, network, World Wide Web, monitor, CPU, keyboard, mouse, speakers, printer, search, copyright Resource, reliability, advertise</p>
Y5	<p><u>e-Safety</u></p> <ul style="list-style-type: none"> ● I can choose a secure password and appropriate screen name ● I protect my password and other personal information ● I can explain why I need to protect myself and my friends and the best ways to do this, including reporting concerns to an adult ● I can talk about the dangers of spending too long online or playing a game ● I can explain the importance of communicating kindly and respectfully ● I can discuss the importance of choosing an age-appropriate website, app or game ● I can explain why I need to protect my computer or device from harm <p>Use CEOP Live Streaming Powerpoints \public\Staff Only\Subject Leader - ICT 2017\Curriculum\E Safety)</p>	<p><u>e-Safety</u></p> <ul style="list-style-type: none"> ● To know what a secure password and an appropriate screen name are and why it is important to keep it safe ● I know my username(s) and password(s) from memory ● To know why I should not share my personal information on the internet. eg name, address, age, phone number, school ● To know some trusted adults I can report worrying things I might see on the internet ● To know how to protect myself and friends from harm online. ● To know how to find the thinkuknow website and how report worrying things ● I know that anything I post online can be seen, used and may affect others ● To know the dangers about spending too long using technology, playing games and being online (addiction, lack of exercise, eyesight) ● To know why I should I ask an adult before downloading files of games from the internet ● To know the importance of selecting websites that are appropriate for my age ● To know the age restrictions for some of the social media websites and games ● I know what positive and negative comments look like and

Programming

- I can decompose a problem into smaller parts to design an algorithm for a specific outcome and use this to write a program
- I can refine a procedure using repeat commands to improve a program
- I can use a variable to increase programming possibilities
- I can change an input to a program to achieve a different output
- I can use 'if' and 'then' commands to select an action
- I can talk about how a computer model can provide information about a physical system
- I can use logical reasoning to detect and debug mistakes in a program
- I use logical thinking, imagination and creativity to extend a program

<https://code.org/student/elementary> Course E

the consequences of posting online

- I know how my computer/device can be protected from harm, by using anti-virus software and downloading/accepting files from unknown sources.

Vocabulary

Internet, information, device, computer, tablet, phone.
Password, username, personal information, age appropriate.
age restrictions, social media

Guidelines, download, upload, comment, post, online.

Protect, harm

Screen name, addiction, appropriate, anti virus software, unknown source.

Programming

- I know some simple instructional language eg Forwards, backwards, turn. left and right, clockwise, anticlockwise, 90 degrees, 180 degrees, 270 degrees, 360 degrees, x and y coordinates on a grid
- I know how to use block coding to achieve specific outcomes and I am starting to use text based code (HTML-Discovery Coding)
- I know how to shorten an algorithm using the repeat command
- I know what a variable is and how it increases the programs possibilities
- I understand the terms input and output
- I know how to use the if and then commands to perform an action
- I know how computer models can provide information for real life applications
- I know how to use logical reasoning to test my program and how to debug it
- To know how to describe and extend an algorithm to perform tasks using imagination and creativity

Vocabulary

Espresso Discovery Coding HTML

Software, button, icon, press, touch, click, function
Forwards, backwards, left, right, function, software, hardware, application (app), algorithm, debug.
execute, precise, unambiguous, instructions.
clockwise, anticlockwise, 90 degrees, block coding, repeat, command
180 degrees. 270 degrees, 360 degrees, sensor, outcomes, x and y coordinates.
HTML, Variable, text based code, input, output, logical

Weblinks: Variables-
<https://www.bbc.co.uk/bitesize/topics/zkcqn39/articles/zw3dwmn>

Handling Data

- I can use a spreadsheet to collect and record data
- I can choose an appropriate tool to help me collect data
- I can present data in an appropriate way including graphs
- I can talk about mistakes in data and suggest how it could be checked

Use 2Investigate from 2Simple and Excel

<http://code-it.co.uk/dlplanning/spreadsheet/spreadsheet> (lessons 1 - 5)

Multimedia

- I can use text, photo, sound and video editing tools to refine my work
- I can use the skills I have already developed to create content

Handling Data

- I know that I can use spreadsheets to collect and record information
- I know how to collect data and identify inaccurate sources of information
- I know how to create a graph from data in a spreadsheet
- I know how to present my data effectively according to the audience

Vocabulary

Hold, icon, drag, text, object
Video, technology, information, sort, pictogram,
Mouse, backspace, spacebar, shift, save, open.
graph, table, chart, organising.
Audience, present, search
Spreadsheet, operators

Multimedia

- To know what a mouse is and its function. including when to use the left and right buttons and the scroll wheel
- To what a keyboard does including the function of backspace, the spacebar, shift, tab keys
- I know how to use the spellchecker and how to correct words

using unfamiliar technology

- I can select, use and combine the appropriate technology tools to create effects that will have an impact on others
- I can select an appropriate online or offline tool to create and share ideas
- I can review and improve my own work and support others to improve their work

Technology in our Lives

- I can describe different parts of the Internet
- I can use different online communication tools for different purposes
- I can use a search engine to find appropriate information and check its reliability
- I can recognise and evaluate different types of information I find on the World Wide Web
- I can describe the different parts of a webpage
- I can find out who the information on a webpage belongs to
- I can describe the ways in which websites advertise their products to me

- I know how to combine text, graphics, sound and video in programs like Word, Powerpoint and Moviemaker or Quik video editor on Tablets
- I know the importance of creating a coherent style throughout a document eg same font
- I know how to use my computing skills to produce work for a specific audience
- To know what the save and open icons looks like
- I know how to share my work and collaborate online using g-suite

Vocabulary

Hold, icon, drag, text, object

Video, technology, information, sort, pictogram,

Mouse, backspace, spacebar, shift, save, open.

Left button, right button, spellchecker, combine, graphics, Word, Powerpoint, snip, crop, resize

Coherent, style, font, document, increase, decrease, tab, modify, purpose.

Moviemaker, G-suite

Technology in our Lives

- I know what the different parts of the internet are (website, domain, web browser, search engine, hyperlink, www, email,)
- I know how to search the internet using keywords to find appropriate websites
- I know to check the reliability of and evaluate information found online
- I understand some images/text/videos are copyright and should check before using in my own work and can find out who the webpage belongs to
- I know the different parts of a website (logo, header, menu, body, pictures, sidebar, internal and external links, forms, Social media links)
- I know which resources on the Internet I can download and use
- I know that websites use different methods to advertise products and the reasons why

Vocabulary

		<p>Technology, television, camera, program, website. Hyperlink, technology Communicating, physical world. Retrieve, network, World Wide Web, monitor, CPU, keyboard, mouse, speakers, printer, search, copyright Resource, reliability, advertise website, domain, web browser, search engine, hyperlink, www, email, domain, web browser, search engine, hyperlink,</p> <p>Weblinks Search Engines: https://www.bbc.co.uk/bitesize/topics/z7wtb9q/articles/ztbja6f</p>
Y6	<p><u>e-Safety</u></p> <ul style="list-style-type: none"> ● I protect my password and other personal information ● I can explain the consequences of sharing too much about myself online ● I support my friends to protect themselves and make good choices online, including reporting concerns to an adult ● I can explain the consequences of spending too much time online or on a game ● I can explain the consequences to myself and others of not communicating kindly and respectfully ● I protect my computer or device from harm on the Internet 	<p><u>e-Safety</u></p> <ul style="list-style-type: none"> ● To know what a secure password and an appropriate screen name are and why it is important to keep it safe ● I know my username(s) and password(s) from memory ● To know why I should not share my personal information on the internet. eg name, address, age, phone number, school ● To know some trusted adults I can report worrying things I might see on the internet ● To know how to protect myself and friends from harm online ● To know how to find the thinkuknow website and how report worrying things ● I know that anything I post online can be seen, used and may affect others ● To know the dangers about spending too long using technology, playing games and being online (addiction, lack of exercise, eyesight) ● To know why I should I ask an adult before downloading files of games from the internet

Programming

- I can deconstruct a problem into smaller steps, recognising similarities to solutions used before
- I can explain and program each of the steps in my algorithm
- I can evaluate the effectiveness and efficiency of my algorithm while I continually test the programming of that algorithm
- I can recognise when I need to use a variable to achieve a required output
- I can use a variable and operators to stop a program
- I can use different inputs (including sensors) to control a device or onscreen action and predict what will happen
- I can use logical reasoning to detect and correct errors in algorithms and programs

- To know the importance of selecting websites that are appropriate for my age
- To know the age restrictions for some of the social media websites and games
- I know what positive and negative comments look like and the consequences of posting online
- I know how my computer/device can be protected from harm, by using anti-virus software and downloading/accepting files from unknown sources

Vocabulary

Internet, information, device, computer, tablet, phone.
Password, username, personal information, age appropriate.
age restrictions, social media
Guidelines, download, upload, comment, post, online.
Protect, harm
Screen name, addiction, appropriate, anti-virus software,
unknown source.
Positive, negative

Programming

- I know some simple instructional language eg forwards, backwards, turn. left and right, clockwise, anticlockwise, 90 degrees, 180 degrees, 270 degrees, 360 degrees, x and y coordinates on a grid
- I know how to use text based coding (HTML and Python - Discovery Coding) to achieve specific outcomes
- I know how to create an effective and efficient algorithm
- I know to test my program to check for bugs and errors and how to correct them
- I know what a variable (a, b) and an operator is (+, -, x, ÷) and how to use them to stop a program
- I know how to use different inputs including sensors to control a device and I can predict the output
- I know how sensors work and how to use them in a program (Sound sensor on Scratch, motion, light and tilt sensors on Lego WeDO and Mbots)
- I know how to use logical reasoning to test my program and

Espresso Discovery Coding Python

<https://code.org/student/elementary> Course F

Handling Data

- I can use formulae to make spreadsheets more efficient
- I can select the most effective tool to collect data for my investigation
- I can check the data I collect for accuracy and plausibility
- I can interpret the data I collect
- I can present the data I collect in an appropriate way
- I use the skills I have developed to interrogate a database/spreadsheet

Use Microsoft Excel

Staff Only\Subject Leader - ICT 2017\Curriculum\Handling Data\Pizza Party

how to debug it

- To know how to describe and extend an algorithm to perform tasks using imagination and creativity

Vocabulary

Software, button, icon, press, touch, click, function
Forwards, backwards, left, right, function, software, hardware, application (app), algorithm, debug.
execute, precise, unambiguous, instructions.
clockwise, anticlockwise, 90 degrees, block coding, repeat, command

180 degrees. 270 degrees, 360 degrees, sensor, outcomes, x and y coordinates.

HTML, Variable, text based code, input, output, logical

Operator, Python, detect

Handling Data

- I know what to type into a cell to create a formula
- I know how to find the sum of a column/row using the sum function
- I know how to find the average of a set of cells using the average function
- I know that I can use spreadsheets and databases to collect and record information
- I know how to collect data and identify inaccurate sources of information
- I know how to create and search a database to answer questions
- I know how to present my data effectively according to the audience

Vocabulary

Hold, icon, drag, text, object
Video, technology, information, sort,
Mouse, backspace, spacebar, shift, save, open.
graph, table, chart, organising.

Audience, present, search

Spreadsheet, operators

Cell, formula, column, row, average, interrogate

Multimedia

Multimedia

- I can talk about audience, atmosphere and structure when planning a particular outcome.
- I can confidently identify the potential of unfamiliar technology to increase my creativity.
- I can combine a range of media, recognising the contribution of each to achieve a particular outcome.
- I can tell you why I select a particular online tool for a specific purpose.
- I can be digitally discerning when evaluating the effectiveness of my own work and the work of others.

Technology in our Lives

- I can describe how information is transported on the Internet <https://www.bbc.co.uk/bitesize/topics/z7wtb9q/articles/z3tbgk7>

Barefoot Plans - see Staff Only\Subject Leader - ICT

2017\Curriculum\Technology in our lives\Modelling the Internet

- I can select an appropriate tool to communicate and collaborate online
- I can talk about the way search results are selected and ranked

(Barefoot Plans- see Staff Only\Subject Leader - ICT
2017\Curriculum\Technology in our lives)

- To know what a mouse is and its function. including when to use the left and right buttons and the scroll wheel.
- To what a keyboard does including the function of backspace, the spacebar, shift, tab keys, shortcut keys for cut, copy and paste.
- I know how to combine text, graphics, sound and video, recognising the contribution of each, in programs like Word, Powerpoint and Moviemaker.
- I know the importance of creating a coherent style throughout a document eg same font.
- I know which online tools to use for specific purposes.
- To know what the save and open icons looks like.
- I know how to share my work and collaborate online using g-suite.

Vocabulary

Hold, icon, drag, text, object

Video, technology, information, sort

Mouse, backspace, spacebar, shift, save, open.

Left button, right button, spellchecker, combine, graphics, Word, Powerpoint, snip, crop, resize

Coherent, style, font, document, increase, decrease, tab, modify, purpose.

Moviemaker, G-suite

Online tool, digitally discerning

Technology in our Lives

- I know how the information is transported on the internet via broadband/fibre/cable/wireless link, packets
- I know how to search the internet using keywords to find appropriate websites
- I know how search results are selected and ranked and for what purpose
- I know to check the reliability of and evaluate information found online
- I understand some images/text/videos are copyright and should check and acknowledge before using in my own work and can find out who the webpage belongs to
- I know which resources on the Internet I can download and use

- I can check the reliability of a website
- I can tell you about copyright and acknowledge the sources of information that I find online
- I know that websites can use my data to make money and target their advertising

- I know that websites use different methods to advertise products and the reasons why, including how they can use my data to make money

Vocabulary

Technology, television, camera, program, website.

Hyperlink, technology

Communicating, physical world.

Retrieve, network, World Wide Web, monitor, CPU, keyboard, mouse, speakers, printer, search, copyright

Resource, reliability, advertise

website, domain, web browser, search engine, hyperlink, www, email, domain, web browser, search engine, hyperlink, Broadband, fibre, cable, wireless link, packets

Weblinks

Search Engines

<https://www.bbc.co.uk/bitesize/topics/z7wtb9q/articles/ztbjq6f>