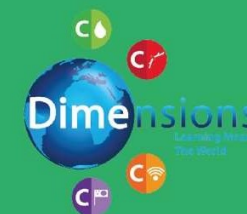




# Computing



## National Curriculum Aims

The national curriculum for computing aims to ensure that all pupils:

- can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation
- can analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems
- can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems
- are responsible, competent, confident and creative users of information and communication technology.

## Expected covered content from Key Stage 1

Pupils should be taught to:

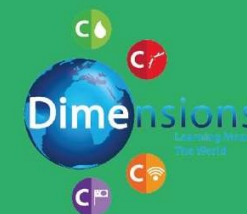
- understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions
- create and debug simple programs
- use logical reasoning to predict the behaviour of simple programs
- use technology purposefully to create, organise, store, manipulate and retrieve digital content
- recognise common uses of information technology beyond school
- use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.

## Actual coverage in Key Stage 2

Pupils should be taught to:	Year 3	Year 4	Year 5	Year 6
• design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts		T3 – L&O		T1 – AWOB T6 – IHAD
• use sequence, selection, and repetition in programs; work with variables and various forms of input and output	T3- AVS			T1 – AWOB
• use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs		T3 – L&O		T1 – AWOB
• understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration		T1 – LS T4 – POP		
• use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content		T6 – CF	T1 – MC	
• 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	T1-TAF T4 – UTC T6 – CFWMA	T4 – POP T6 – CF	T1 – MC T3 – YNI T4 – FOB T6 – CFWMA	T3 – WOTW T4 – GW T6 – IHAD
• use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.	T3 – AvS (PSHE) T6 – CFWMA	T1 – LS (PSHE) T4 – POP	T2 – GWTF (PSHE) T3 – YNI	T1 – AWOB (PSHE)



# Computing



## Knowledge Building

### Digital Citizenship

**Digital Citizenship** (which encompasses e-safety) is considered the ability to access digital technology safely and responsibly, as well as being an active, respectful, discerning member of society both online and offline. Pupils will learn to identify situations that make them feel uncomfortable and understand how to resolve these. They will also learn that digital citizenship relates to their own behaviour online, as well as that of others. They will know that they must report anything they see or hear that they don't like to an adult and begin to monitor their **online behaviours** to ensure their own safety. As ethical digital citizens, they will analyse the validity of online content, understand the importance of copyright, and respectfully evaluate and challenge online content.

### Computer Science

The core of computing is **Computer Science**, in which pupils are taught the principles of information and computation, how digital systems work, and how to put this knowledge to use through programming. In simple terms, pupils will know that inputting simple instructions into a controllable device is a form of computer science. The progression of knowledge in this area will come through developing computational language and thinking, understanding what **algorithms** are and how they can be used to write code to **program** a device using increasingly complex steps.

### Data

**Data** is a term used to cover collective information that can be presented in several ways. Pupils will have had experience of handling data in mathematics and will have opportunities to cross-reference these skills with computer programs that can be used to sort and present data. By using computer data programs, large amounts of data can be processed and presented easily. Pupils will have experience of using **databases and spreadsheet programs**.

### Information Technology

**Information Technology** provides a context for the use of computers in society - historically, currently and in the future. Through real-life contexts, pupils will link what are often abstract ideas involving technology to everyday life, and therefore understand the practical applications of computing in the wider world. This will show them how computing is integral to the world around them, enabling them to identify and understand the uses of technology in daily life. This includes computer networks; the internet and the World Wide Web; radio and satellites; search technologies and how they work.

### Technical Vocabulary

Learning about computing brings a significant amount of domain-specific **technical vocabulary**. Vocabulary in computing also changes regularly as processes, programs and applications adapt and develop. Pupils will explore an ever-increasingly complex dictionary of **technical terms and vocabulary** and will be encouraged to implement them when using computers and devices in all curriculum areas.

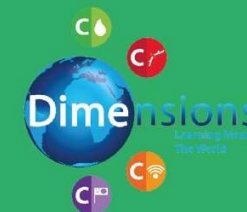
### Multimedia

**Multimedia** is a term used to cover a range of media devices and applications. Multimedia includes the use and combination of video, audio, graphics and text to interact and communicate with an audience. Pupils will have the opportunity to design and produce **digital content** of their own, using a range of media and consider the audience they are creating it for. Many pupils will be familiar with creating content and be increasingly aware of how the work of others can be accessed online.





# Computing



## End Goals

### Adventurers / LKS2

Our aim in teaching computing in Adventurers is to embed pupils' knowledge of computing within the context of the world around them. Adventurers ensures that pupils should become increasingly digitally literate, able to use, and express themselves and develop their ideas through, information and communication technology, and associated technical vocabulary. They should learn about computer networks and the history of the internet, key moments and figures involved in shaping the World Wide Web, and how this allows communication around the world. Via our 'Safe Zone' lessons, pupils should deepen their knowledge of digital citizenship, begin to evaluate the validity of online content, and understand further the concepts of copyright and ownership. Pupils will develop further computational skills to create and manipulate programmes, using repetition, loops and selection and be able to talk about intended and specific outcomes. Pupils should have a secure understanding of the role of algorithms and be able to successfully use them within programming, developing their debugging skills. Adventurers continues to bring computing to life for the pupils, drawing upon their interests and experiences and placing computing into relevant contexts for learning. For example, during 'That's All Folks!' pupils should learn about animation, from its very beginnings through to modern-day technologies. As well as using digital tools to create animated media, pupils should expand their skillset with a greater range of tools and techniques to create digital multimedia for a purpose, critically evaluating their process.

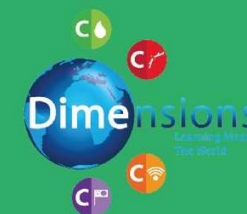
### Navigators / UKS2

Our aim in teaching computing in Navigators is to deepen pupils' understanding and appreciation of computational thinking and creativity to understand and change the world. Through a curriculum deeply rooted in digital citizenship, via 'Safe Zone', pupils will broaden their knowledge of how to use devices safely and discerningly to become safe, active, and responsible digital citizens. They should be capable of making well-informed decisions about their safety online, as well as being adept at critically evaluating digital content, challenging the validity of sources of information online, and forming their own opinions. Pupils should be able to choose from a variety of software and online resources to create their own digital content. They should develop a range of skills, including being able to analyse, evaluate and present information on a range of devices for specific purposes. Pupils' knowledge of computer science should broaden to allow them to confront more complex computational concepts, such as creating and combining variables within programming and become proficient at debugging these using computational thinking skills. Pupils should continue to learn computing through relevant contexts. For example, in 'A World of Bright Ideas', while learning about the process of innovation and invention, pupils will develop their own computer games for different audiences. In 'Mission Control', whilst researching, pupils will learn to use search engines, know how results are selected and ranked and will deepen their knowledge of the history of digital technologies, including satellites, and how these technologies are shaping the future.





# Computing

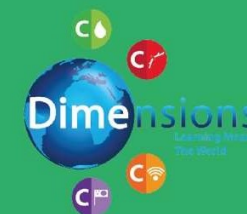


## ADVENTURERS (Years 3 and 4)







Knowledge Building					
Digital Citizenship	Computer Science	Data	Information Technology	Technical Vocabulary	Multimedia
Know that not everything online is true and take care when communicating and sharing information	Know how to use repetition, loops and selection and how to decompose problems to create solutions	Know how to use technology, such as data loggers, to collect information and draw conclusions	Know how networks and the internet work, the history of the WWW and the opportunities for communication online	Know and understand the terms 'network', 'input', 'output', 'World Wide Web', 'PageRank' and 'Sprite'	Know how to use a range of tools to combine, edit and enhance a range of media for a particular purpose or effect
Skills Progression					
Computing / ICT Skills Adventurers 1 and 2 / Year 3 and 4					
Digital Citizenship	Computer Science	Data	Information Technology	Multimedia	
DC4 Verify the accuracy and reliability of the information found, distinguishing between fact and opinion DC5 Use ICT to exchange ideas and collaborate with others remotely DC6 Use ICT safely and appreciate the need to keep electronic data secure	CS4 Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems CS5 Solve problems by decomposing them into smaller parts CS6 Use sequence, selection, and repetition in programs CS7 Work with variables and various forms of input and output CS8 Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs	D3 Identify how ICT can be used to collect and structure information so that it can be searched and analysed D4 Capture, record and analyse data using sensors in order to support observations and investigations	IT4 Save and use stored information to follow lines of enquiry IT5 Identify the opportunities computer networks offer for communication and collaboration IT6 Use key words to search for and select appropriate information from the internet and other digital sources IT7 Understand computer networks including the Internet, recognizing how they can provide multiple services, such as the world-wide web	Mm6 Explore alternative approaches to develop and refine work Mm7 Use a variety of ICT tools to create, refine and present work in a variety of ways Mm8 Use features of layout, presentation and organisation in print and on screen Mm9 Use editing skills for visual effects	



# Computing

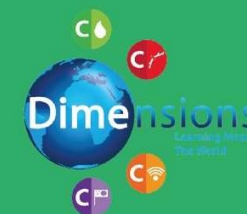


## Knowledge Progression Term 1 and Term 2

Adventurers 1 / Year 3	Adventurers 2 / Year 4
<p><b>"That's All, Folks!"</b></p> <p> <b>MULTIMEDIA (ANIMATION)</b></p> <p>Pupils will understand about the concept of animation - from the definition to techniques - to help them link what they see on television and in the media to the practices used to create them. Pupils will also learn about the history of animation, understand the different types of animation and create their own for others to watch.</p> <p><b>Concepts</b></p> <p><b>NC</b> – Know how to 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</p> <ul style="list-style-type: none"> <li>To know what animation is</li> <li>To understand the history of animation</li> <li>To know some famous animations and how they are made</li> <li>To know the different methods of animation</li> </ul> <p>To understand how to create a stop motion animation</p>	<p><b>Lightning Speed</b></p> <p> <b>COMPUTER NETWORKS</b></p> <p>Pupils will learn about networks within computing and the World Wide Web. They will explore the concept of Local Area Networks (LAN) that link computers, printers, laptops and servers to one another. They will find out about the work of Tim Berners-Lee and how the Internet differs from the World Wide Web. Pupils will explore the links between servers globally and that email is sent using a wide range of servers and connections.</p> <p><b>Concepts</b></p> <p><b>NC</b> - To understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration</p> <p>A. To understand that the computers in a school are connected together in a network</p> <p>B. To understand why computers are networked</p> <p>C. To understand the difference between the internet and the World Wide Web (WWW)</p> <p>D. To understand that servers on the internet are located across the planet</p> <p>To understand how email is sent across the internet</p>
<p> <b>Lindow Man (Term 2)</b></p> <p>No Computing in this Project</p> <p> <b>Rocky the Findosaur (Term 2)</b></p> <p>No Computing in this Project</p>	<p> <b>Out and About (Term 2)</b></p> <p>No Computing in this Project</p> <p> <b>May the Force Be With You (Term 2)</b></p> <p>No Computing in this Project</p>



# Computing



## Knowledge Progression Term 3 and Term 4

### Adventurers 1 / Year 3

#### Athens v Sparta



#### DIGITAL CITIZENSHIP

Pupils will look at E-safety from the perspective of malware (malicious software) and more specifically Trojan Horse computer programs. Pupils will look at what Trojan Horse programs can do, how they can protect their computers from them and the links between computing Trojan Horses and THE Trojan Horse.

#### Concepts

**NC** – Know how to use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.

- To understand the Trojan Horse and its history

#### COMPUTER SCIENCE

This begins by watching and listening to Zorba's Dance and learning a dance similar to this by viewing it as an algorithm. Pupils will learn how to use flowcharts to represent algorithms. Pupils then use Scratch to explore a range of inputs that can be used, and when modelling the use of inputs within programming, a written frame of 'When..... then.....' is used to introduce the concept of selection within algorithms. Finally, pupils design and program a Scratch game using repetition and selection.

**NC** – Know how to use sequence, selection, and repetition in programs, work with variables and various forms of input and output

#### Under the Canopy



#### DATA

Pupils will make use of data loggers to complete a temperature-based investigation, measuring temperature over time. Firstly, pupils will learn about the use of data loggers in the wider world, before using data loggers to investigate temperature over time. They will then use computer software to create charts and graphs and draw conclusions from them.

#### Concepts

**NC** – Know how to 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

- To know how to record and analyse data using data logging devices

### Adventurers 2 / Year 4

#### Law and Order



#### COMPUTER SCIENCE

Pupils are introduced to the programming environment of Kodu. They create a 3D world and a game within it, focusing on rules and order within their game. Using a mixture of unplugged lessons and Kodu itself, pupils will explore the concept of selection in programming. They will use this knowledge to program elements of their game and apply their knowledge to create their own individual features.

#### Concepts

**NC** – Know how to use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs

**NC** – Know how to design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts

- To know how to create a 3D world within Kodu
- To know how to Identify selection
- To understand and use selection with Kodu

#### Picture Our Planet



#### MULTIMEDIA (PHOTO EDITING)

Pupils will understand why photos may be edited in the wider world, pupils will use photo editing software to use more advanced tools, blending modes, adjustments, and filters for editing photos and evaluating the effect they have on the photo.

#### Concepts

- **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 (NC)**
- Understand how to edit photos using advanced tools and filters

#### INFORMATION TECHNOLOGY (EMAIL)

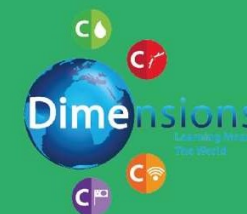
Pupils will find out about email and consider why people use it and its advantages of it. They will also need to consider whether there are any disadvantages. Computing, ties in with Part Two, Scotland. Pupils will send an email to a wildlife photographer and nature tour leader.

#### Concepts

- **To understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration (NC)**
- **To know how to use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact (NC)**



# Computing



## Knowledge Progression Term 5 and Term 6

### Adventurers 1 / Year 3

#### Three Giant Steps (Term 5)



No Computing in this Project

#### Saxon King (Term 5)



No Computing in this Project

### Adventurers 2 / Year 4

#### Window on the World (Term 5)



No Computing in this Project

#### Viking Warrior (Term 5)



No Computing in this Project

#### Come Fly With Me! Africa



#### MULTIMEDIA (PUBLISHING)

Pupils will learn basic publishing skills in order to create an eye-catching poster about an aspect of African life of their choosing. Firstly, they will analyse examples of posters, identifying common features and like and dislikes in terms of layout, typography etc. Pupils will develop their word processing and publishing skills and carry out some additional research on a chosen aspect of African life or culture. Finally, pupils will use the research and apply the skills learnt to create their posters.

#### Concepts

**NC** – Know how to 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

**NC** – Understand how to use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact

- To know how to use publishing software to create an eye-catching information poster

#### Cry Freedom (Term 6)



#### PRESENTATION

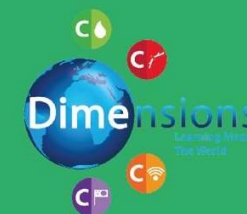
Building on their work with presentation software used in Going Wild in Pathfinders, pupils will critically evaluate the quiz template provided, analyse the animations, and design, recreate or adapt it to create their own quiz (changing colour schemes, backgrounds etc.) and adding effects as appropriate.

#### Concept

- Know how to create a quiz using a presentation program



# Computing

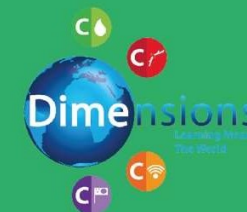


Key Vocabulary	
Adventurers 1 / Year 3	Adventurers 2 / Year 4
"That's All, Folks!" (Term 1)	Lightning Speed (Term 1)
animation animate stop-motion cartoon video frame frames per second (fps) armature photograph record storyboard	local area network LAN server connected network wireless main hub devices workstation printer Internet World Wide Web data transfer client browser webpage email collaboration
Lindow Man (Term 2)	Out and About (Term 2)
No computing in this project	No computing in this project
Rocky the Findosaur (Term 2)	May the Force Be With You (Term 2)
No computing in this project	No computing in this project





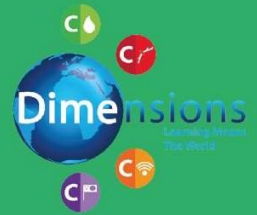
# Computing



Key Vocabulary	
Adventurers 1 / Year 3	Adventurers 2 / Year 4
Athens v Sparta (Term 3)	Law and Order (Term 3)
Trojan Horse malware malicious software virus invade personal data confidential safety Zorba dance instructions steps algorithm flowchart Scratch block-based repetition input output when then	algorithm flowchart coding instructions order start stop selection repetition loop events command tab debug Kodu Programming environment logical reasoning abstraction
Under The Canopy (Term 4)	Picture Our Planet (Term 4)
data data logging data logger software input output device investigate sensor plot chart graph line graph monitor temperature	photo photo editing tools blending modes adjustments filters effects sliders RGB email email address connection advantage disadvantage .com .co.uk domain



# Computing



Key Vocabulary	
Adventurers 1 / Year 3	Adventurers 2 / Year 4
Three Giant Steps (Term 5)	Window on the World (Term 5)
No computing in this project	No computing in this project
Saxon King (Term 5)	Viking Warrior (Term 5)
No computing in this project	No computing in this project
Come Fly With Me! Africa (Term 6)	Cry Freedom (Term 6)
research collate present publishing software present typography layout colour scheme tools	





# Computing



Safe Zone Skills Progression (Education for a Connected World)			
Adventurers 1 / Year 3		Adventurers 2 / Year 4	
Self-Image and Identity	Online Relationships	Self-Image and Identity	Online Relationships
<p>I can explain what is meant by the term 'identity'.</p> <p>I can explain how people can represent themselves in different ways online.</p> <p>I can explain ways in which someone might change their identity depending on what they are doing online (e.g. gaming; using an <b>avatar</b>; social media) and why.</p>	<p>I can describe ways people who have similar likes and interests can get together online.</p> <p>I can explain what it means to 'know someone' online and why this might be different from knowing someone offline.</p> <p>I can explain what is meant by 'trusting someone online', why this is different from 'liking someone online', and why it is important to be careful about who to trust online including what information and content they are trusted with.</p> <p>I can explain why someone may change their mind about trusting anyone with something if they feel nervous, uncomfortable or worried.</p> <p>I can explain how someone's feelings can be hurt by what is said or written online.</p> <p>I can explain the importance of giving and gaining permission before sharing things online; how the principles of sharing online is the same as sharing offline e.g. sharing images and videos.</p>	<p>I can explain how my online identity can be different to my offline identity.</p> <p>I can describe positive ways for someone to interact with others online and understand how this will positively impact on how others perceive them.</p> <p>I can explain that others online can pretend to be someone else, including my friends, and can suggest reasons why they might do this.</p>	<p>I can describe strategies for safe and fun experiences in a range of online social environments (e.g. <b>livestreaming</b>, gaming platforms).</p> <p>I can give examples of how to be respectful to others online and describe how to recognise healthy and unhealthy online behaviours.</p> <p>I can explain how content shared online may feel unimportant to one person but may be important to other people's thoughts feelings and beliefs.</p>
Online Reputation	Online Bullying	Online Reputation	Online Bullying
<p>I can explain how to search for information about others online.</p> <p>I can give examples of what anyone may or may not be willing to share about themselves online. I can explain the need to be careful before sharing anything personal.</p> <p>I can explain who someone can ask if they are unsure about putting something online.</p>	<p>I can describe appropriate ways to behave towards other people online and why this is important.</p> <p>I can give examples of how bullying behaviour could appear online and how someone can get support.</p>	<p>I can describe how to find out information about others by searching online.</p> <p>I can explain ways that some of the information about anyone online could have been created, copied or shared by others.</p>	<p>I can recognise when someone is upset, hurt or angry online.</p> <p>I can describe ways people can be bullied through a range of media (e.g. image, video, text, <b>chat</b>).</p> <p>I can explain why people need to think carefully about how content they post might affect others, their feelings and how it may affect how others feel about them (their reputation).</p>



# Computing



Safe Zone Skills Progression (Education for a Connected World)			
Adventurers 1 / Year 3		Adventurers 2 / Year 4	
Managing Online Information	Health, Well-Being and Lifestyle	Managing Online Information	Health, Well-Being and Lifestyle
<p>I can demonstrate how to use key phrases in search engines to gather accurate information online.</p> <p>I can explain what <b>autocomplete</b> is and how to choose the best suggestion.</p> <p>I can explain how the internet can be used to sell and buy things.</p> <p>I can explain the difference between a 'belief', an 'opinion' and a 'fact'. and can give examples of how and where they might be shared online, e.g. in videos, memes, posts, news stories etc.</p> <p>I can explain that not all opinions shared may be accepted as true or fair by others (e.g. monsters under the bed).</p> <p>I can describe and demonstrate how we can get help from a trusted adult if we see content that makes us feel sad, uncomfortable worried or frightened.</p>	<p>I can explain why spending too much time using technology can sometimes have a negative impact on anyone, e.g. mood, sleep, body, relationships; I can give some examples of both positive and negative activities where it is easy to spend a lot of time engaged (e.g. doing homework, games, films, videos).</p> <p>I can explain why some online activities have age restrictions, why it is important to follow them and know who I can talk to if others pressure me to watch or do something online that makes me feel uncomfortable (e.g. age restricted gaming or web sites).</p>	<p>I can analyse information to make a judgement about probable accuracy and I understand why it is important to make my own decisions regarding content and that my decisions are respected by others.</p> <p>I can describe how to search for information within a wide group of technologies and make a judgement about the probable accuracy (e.g. social media, image sites, video sites).</p> <p>I can describe some of the methods used to encourage people to buy things online (e.g. advertising offers; <b>in-app purchases, pop-ups</b>) and can recognise some of these when they appear online.</p> <p>I can explain why lots of people sharing the same opinions or beliefs online do not make those opinions or beliefs true.</p> <p>I can explain that technology can be designed to act like or impersonate living things (e.g. <b>bots</b>) and describe what the benefits and the risks might be.</p> <p>I can explain what is meant by <b>fake news</b> e.g. why some people will create stories or alter photographs and put them online to pretend something is true when it isn't.</p>	<p>I can explain how using technology can be a distraction from other things, in both a positive and negative way.</p> <p>I can identify times or situations when someone may need to limit the amount of time they use technology e.g. I can suggest strategies to help with limiting this time.</p>





# Computing



Safe Zone Skills Progression (Education for a Connected World)			
Adventurers 1 / Year 3		Adventurers 2 / Year 4	
Privacy and Security	Copyright and Ownership	Privacy and Security	Copyright and Ownership
<p>I can describe simple strategies for creating and keeping passwords private.</p> <p>I can give reasons why someone should only share information with people they choose to and can trust.</p> <p>I can explain that if they are not sure or feel pressured then they should tell a trusted adult.</p> <p>I can describe how connected devices can collect and share anyone's information with others.</p> <p>I can describe how connected devices can collect and share anyone's information with others.</p>	<p>I can explain why copying someone else's work from the internet without permission isn't fair and can explain what problems this might cause.</p>	<p>I can describe strategies for keeping personal information private, depending on context.</p> <p>I can explain that internet use is never fully private and is monitored, e.g. adult supervision.</p> <p>I can describe how some online services may seek consent to store information about me; I know how to respond appropriately and who I can ask if I am not sure.</p> <p>I know what the <b>digital age of consent</b> is and the impact this has on online services asking for consent.</p>	<p>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.</p> <p>I can give some simple examples of content which I must not use without permission from the owner, e.g. videos, music, images.</p>





# Computing



## Safe Zone Knowledge Progression (Education for a Connected World)

Adventurers 1 / Year 3	Adventurers 2 / Year 4
<p align="center"><b>Lesson 1 – Self-Image and Identity</b></p> <p><b>Mission:</b>  <b>To create a new identity card to access the Safe Zone and to create an avatar for online presence</b>            This is the first lesson of the Year 3 Safe Zone where pupils are introduced to the Safe Zone and become Cadets for the year. In this lesson, pupils learn about online identity and why is important to keep their identity safe online. To protect their identity online, pupils create their own avatars and fill in identity passes.</p> <p><b>Key Vocabulary</b>            identity, avatar, safety, security, presence, breach, represent, change</p>	<p align="center"><b>Lesson 1 – Online Relationships &amp; Online Bullying</b></p> <p><b>Mission:</b>  <b>To understand downtime and how we should behave during it</b>            This is the first lesson of the Year 4 Safe Zone where pupils take on the role of Lieutenant for the year. In this lesson, pupils look at their 'downtime'. They discuss online activities they like to do in their spare time, the difficulties they could face, and how they should conduct themselves.</p> <p><b>Key Vocabulary</b>            downtime, hobbies, precautions, strangers, live-stream, friend request, add, connection</p>
<p align="center"><b>Lesson 2 – Online Relationships &amp; Online Bullying</b></p> <p><b>Mission:</b>  <b>Part 1 - To create or update an online forum linked to the school website that shares class news and pupils' interests</b>  <b>Part 2 - To understand cyber-bullying and offer advice on how to deal with it</b>            This lesson is split into two parts but could also be an ongoing task that can be regularly revisited. Pupils will need some teaching around how to use any online space chosen by individual schools. They will learn about how we should conduct ourselves when communicating online and create a class charter to work towards. Pupils will also discuss cyber-bullying and discuss how to deal with this.</p> <p><b>Key Vocabulary</b>            communication, online, website, platform, chat, post, comment, bullying, advice, conversation</p>	<p align="center"><b>Lesson 2 – Health, Well-Being and Lifestyle</b></p> <p><b>Mission:</b>  <b>To reflect on screen time and what you access online</b>            In this lesson, pupils look at the distraction technology can be, from both a positive and negative viewpoint. Pupils will learn about the daily recommended screen time limits and discuss whether they think this is suitable. They will discuss different scenarios around technology as a distraction and decide whether their use is healthy by filling in a Personal Technology Audit.</p> <p><b>Key Vocabulary</b>            distraction, focus, concentration, engrossed, limit, screen time, technology, audit</p>
<p align="center"><b>Lesson 3 – Online Reputation &amp; Managing Online Information</b></p> <p><b>Mission:</b>  <b>To ensure personal information shared online is limited and navigate using a search engine with precision and skill in order to gain relevant information quickly</b>            In this lesson, pupils will review their digital footprint to understand what they share online (or what others have shared about them). They then learn about the validity of information on the internet, by being sent the ruse of a fake website. Pupils will learn the acronym CHASERS to guide them with safe internet searching.</p> <p><b>Key Vocabulary</b>            digital footprint, share, consent, reputation, validity, trust, accuracy, belief, fact, opinion, CHASERS</p>	<p align="center"><b>Lesson 3 – Online Reputation &amp; Managing Online Information</b></p> <p><b>Mission:</b>  <b>To question the validity of online sources of information</b>            In this lesson, pupils will extend their knowledge of safe searching of the internet by being shown another fake website. This time, they use the Knowledge CHASERS acronym from Year 3 to see if they can check the validity of the information for themselves. They will begin to understand the terms 'fake news' and 'misinformation' and the reasons people might post these.</p> <p><b>Key Vocabulary</b>            fake news, misinformation, fictional, factual, discerning, accuracy, impersonate, informal, formal</p>



# Computing



## Safe Zone Knowledge Progression (Education for a Connected World)

Adventurers 1 / Year 3	Adventurers 2 / Year 4
<p align="center"><b>Lesson 4 – Health, Well-Being and Lifestyle</b></p> <p><b>Mission:</b>  <b>To complete a reflective assessment of your current computing usage and activity</b>            In this lesson, pupils will review their usage of digital devices and set targets for the future. Pupils will complete 'Health and Well-Being assessments' by answering questions about their usage of digital devices. This lesson should enable pupils to be more aware of how they spend their time online.</p> <p><b>Key Vocabulary</b>            screen time, usage, blue light, impact, restrictions, emotions, rage quit, audit, questionnaire</p>	<p align="center"><b>Lesson 4 – Self-Image and Identity</b></p> <p><b>Mission:</b>  <b>To review online identity</b>            In this lesson, pupils will explore the difference between online and offline identities. They will look at sample social media accounts and evaluate whether the example accounts are behaving correctly or not. They will begin to understand the term impersonation and explore the reasons behind why this happens.</p> <p><b>Key Vocabulary</b>            violation, protocol, identity, impersonation, pretend, public, social media, implications</p>
<p align="center"><b>Lesson 5 – Privacy and Security</b></p> <p><b>Mission:</b>  <b>To understand the practice of creating passwords for online files and identifying and generating good passwords</b>            In this lesson, pupils develop their knowledge of passwords and why they are important. Pupils will be able to identify what makes a good password and they will learn to create passwords of their own. They will understand good practice in terms of passwords e.g. changing them regularly and not sharing them with others.</p> <p><b>Key Vocabulary</b>            password, strong, special character, thumbprint, retina, face / voice recognition, share, secure</p>	<p align="center"><b>Lesson 5 – Copyright and Ownership</b></p> <p><b>Mission:</b>  <b>To create an online portfolio being aware of copyright and ownership</b>            In this lesson, pupils will build upon their knowledge of copyright and ownership and use this to create an online portfolio application for the role of Captain of the Safe Zone. Pupils will use the internet safely with discernment to find images they are able to reuse, showing awareness of copyright licenses.</p> <p><b>Key Vocabulary</b>            portfolio, application, reuse, digital content, sources, Google Sites, Microsoft Sway, information, publish, privacy settings</p>
<p align="center"><b>Lesson 6 – Copyright and Ownership</b></p> <p><b>Mission:</b>  <b>To understand that work can be easily copied online and to consider the information I share</b>            In this final lesson in Year 3, pupils progress from Cadets to Lieutenants. Pupils will learn that work can be easily copied online, but that it is not always right to do so. They should learn when it is okay to share content created by others and develop their knowledge of copyright and ownership by finding free-to-use images that they can use in their work.</p> <p><b>Key Vocabulary</b>            copy, ownership, free to use, license, copyright, purchase, infringement, legal action</p>	<p align="center"><b>Lesson 6 – Privacy and Security</b></p> <p><b>Mission:</b>  <b>Begin to develop a knowledge of privacy and consent</b>            In this lesson, pupils will receive the news of their promotion from Lieutenant to Captain. They will explore the concept of consent, terms and conditions and the digital age of consent. Pupils will start to understand the types of information requested by companies during sign-up processes, why they ask for this, and how they use it. They will understand why certain apps have age limits, and why they should be wary of trying to access things above their age range.</p> <p><b>Key Vocabulary</b>            consent, terms and conditions, share, permission, digital age of consent, request, advertising, monetise, information, data, monitor, precautions, age-appropriate</p>



# Computing



## NAVIGATORS (Years 5 and 6)







Knowledge Building					
Digital Citizenship	Computer Science	Data	Information Technology	Technical Vocabulary	Multimedia
Know how to be a discerning digital citizen, questioning the validity of content and challenging improper representations	Know how to recognise, create and combine variables	Know what a spreadsheet is, what it is used for and how to create one	Understand how to use search engines, how results are selected and ranked, and know about satellite technologies	Know and understand the terms 'block', 'command', 'simulation', 'script' and 'variables'	Know how to identify hardware / software needed to fulfil a specific task & create new content using existing media
Skills Progression					
Computing / ICT Skills Navigators 1 / Y5 and Navigators 2 / Y6					
Digital Citizenship	Computer Science	Data	Information Technology	Multimedia	
DC7 Verify the accuracy and reliability of the information found online, detect bias and distinguish evidence from opinion DC8 Identify a range of ways to report concerns and inappropriate behaviour DC9 Use ICT safely, respectfully and responsibly, managing risk and showing awareness of other users	CS4 Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems CS5 Solve problems by decomposing them into smaller parts CS6 Use sequence, selection, and repetition in programs CS7 Work with variables and various forms of input and output CS8 Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs	D5 Use ICT to explore and develop simple models by changing variables and simple formulae D6 Answer questions by using ICT to identify, collect, store, analyse and present information D7 Represent data from analysis in appropriate ways, including the use of graphs	IT8 Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content	Mm10 Analyse, describe and discuss the effectiveness of the work with ICT Mm11 Use a variety of ICT tools to create, develop and refine presentations and performances, integrating effect to enhance outcomes Mm12 Select, use and combine a variety of software (including internet services) on a range of digital devices to accomplish given goals, including collecting, analysing, evaluating and presenting data and information Mm13 Organise and adjust communication according to the needs of the audience and the technology, including taking account of the quality and content of the communication Mm14 Use a variety of ICT tools to create, refine and present work in a variety of digital and printed formats using appropriate forms and conventions.	





# Computing



Knowledge Progression	
Navigators 1 / Year 5	Navigators 2 / Year 6
<p><b>Mission Control</b></p> <p> <b>MULTIMEDIA (VECTOR ARTWORK)</b> Pupils will learn about vector drawings and how they are created. They will understand the differences between traditional drawing, digital raster graphics and vector graphics. Finally, they will develop the skills needed to be able to create their own vector artwork, based on the theme of space exploration, using vector artwork software such as Vectr (<a href="https://vectr.com">https://vectr.com</a>).</p> <p><b>Concepts</b> <b>NC</b> – Know how to 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</p> <ul style="list-style-type: none"> <li>To understand and know how to create vector artwork</li> </ul> <p><b>INFORMATION TECHNOLOGY</b> Pupils will learn how to use search technologies effectively, learning about search engines and search operators. This is not a standalone lesson but linked to one of the History lessons in the theme.</p> <p><b>Concepts</b> <b>NC</b> – Know how to use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content</p> <ul style="list-style-type: none"> <li>To know how to use search technologies effectively</li> </ul>	<p><b>A World of Bright Ideas</b></p> <p> <b>COMPUTER SCIENCE</b> Computing in this unit follows a series of activities in which pupils refine and develop their skills in the Scratch coding program. Pupils will begin by playing and then analysing maths games that are already accessible online. They will consider how they work in terms of coding. They will then revisit how to use variables, inputs and repetition commands. Pupils will then subsequently design, make and program their own numeracy game (including a scoring system) using variables, selection and repetition. Pupils will have the opportunity to peer assess their games at the end of the series.</p> <p><b>Concepts</b> <b>NC</b> – Know how to design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts <b>NC</b> – Know how to use sequence, selection, and repetition in programs, work with variables and various forms of input and output <b>NC</b> – Know how to use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs</p> <ul style="list-style-type: none"> <li>To know how to use variables and inputs within Scratch</li> <li>To understand how to use repetition and variables to create a scoring system</li> <li>To know how to design a numeracy game to include variables, selection and repetition</li> <li>To know how to program the designed game using variables, selection and repetition</li> </ul>
<p> <b>The Rescuers (Term 2)</b></p> <p>No Computing in this Project</p> <p> <b>Go With The Flow (Term 2)</b></p> <p>No Computing in this Project</p>	<p> <b>True Crime? (Term 2)</b></p> <p>No Computing in this Project</p> <p> <b>Time Team (Term 2)</b></p> <p>No Computing in this Project</p>



# Computing







Knowledge Progression	
Navigators 1 / Year 5	Navigators 2 / Year 6
<p><b>You're Not Invited</b></p> <p><b>MULTIMEDIA (CAD – Computer Aided Design)</b></p> <p>Pupils will research and analyse different Roman villa designs then sketch and annotate their own. Following this, pupils will be introduced to the chosen digital paint or CAD (Computer-Aided Design) software, build the necessary skills, and use these to design and create a 2D floorplan or 3D CAD Roman villa digitally.</p> <p><b>Concepts</b></p> <p><b>NC</b> - To 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</p> <p><b>NC</b> - To use technology safely, respectfully and responsibly; recognise acceptable / unacceptable behaviour; identify a range of ways to report concerns about content and contact</p> <ul style="list-style-type: none"> <li>To understand and know how to use CAD (Computer-Aided Design)</li> </ul>	<p><b>Wars of the World</b></p> <p><b>MULTIMEDIA (PUBLISHING / DESIGN)</b></p> <p>Pupils will use and apply the multimedia skills they have developed throughout Pathfinders and Adventurers to create a #childrennotsoldiers poster, combining and using a variety of software to achieve this. Pupils will already have had several opportunities to make posters. However, they will now need to employ knowledge and skills of a simple design or word processing program to produce a poster with a clear message. Pupils should use a variety of design software to achieve their result.</p> <p><b>Concepts</b></p> <p><b>NC</b> – Know how to 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</p> <ul style="list-style-type: none"> <li>To know how to use design software to create a poster.</li> </ul>
<p><b>Full of Beans</b></p> <p><b>MULTIMEDIA (VIDEO EDITING)</b></p> <p>Pupils will use video editing software, such as iMovie or Windows Movie Maker, to create a short movie showing the importance of saving energy (local, national, international / global impact). Pupils will learn about camera angles and how they can be used to create different effects. Pupils will learn a variety of skills using digital devices such as recording video and sound, importing media, editing media within the software, adding transitions, adding audio, adding text / titles, and creating visual effects. They will then write scripts or storyboards, and use the skills learnt and apply them to the chosen video editing software to create their final video.</p> <p><b>Concepts</b></p> <p><b>NC</b> – Know how to 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</p> <ul style="list-style-type: none"> <li>To know how to use video editing software to create a short movie clip</li> </ul>	<p><b>Global Warning</b></p> <p><b>MULTIMEDIA (PRESENTATION, WORD PROCESSING AND PUBLISHING)</b></p> <p>There are two computing tasks in this unit. One of the tasks is related to the board game design technology task, where pupils will show their knowledge and skills in using presentation programs to produce the presentation for their board game. Secondly, pupils will use a word processing package to produce a newspaper report. Then, they should use a range of ICT programs to present these texts, making informed choices about which electronic tools to use for different purposes i.e. using columns, adding images, etc.</p> <p><b>Concepts</b></p> <p><b>NC</b> – Know how to 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</p> <ul style="list-style-type: none"> <li>To know how to use presentation software to create a digital presentation</li> <li>To know how to use word processing software to create a newspaper report</li> </ul>





# Computing



Knowledge Progression	
Navigators 1 / Year 5	Navigators 2 / Year 6
 <p><b>Been Around the World (Term 5)</b></p> <p>No Computing in this Project</p>  <p><b>British Bulldog (Term 5)</b></p> <p>No Computing in this Project</p>	 <p><b>In Your Element (Term 5)</b></p> <p>No Computing in this Project</p>  <p><b>Pharaoh Queen (Term 5)</b></p> <p>No Computing in this Project</p>
<p><b>Come Fly With Me! America</b></p> <p><b>DATA</b> pupils will learn key features of spreadsheets such as cells, functions and formulae, and using the information gathered from the Maths Pupil-Led Activity, create graphs and bar charts etc. Following this, pupils will develop their skills further by researching and budgeting for a visit to an American theme park.</p> <p><b>Concepts</b> <b>NC</b> - To 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</p> <ul style="list-style-type: none"> <li>To know how to use spreadsheet software to collect, store, analyse and represent data</li> </ul>	<p><b>'I Have a Dream...'</b></p> <p><b>MULTIMEDIA (SOUND RECORDING)</b> Pupils will assimilate and apply a range of skills in using recording and presenting software. They will look at how sound, visuals and narration can work together to produce an effective and engaging speech. Whilst producing their broadcast, pupils will need to consider who they would like to show it to, and why they have chosen that person or group of people.</p> <p><b>Concepts</b> <b>NC</b> - To 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</p> <ul style="list-style-type: none"> <li>To know how to create a multimedia broadcast</li> </ul> <p><b>COMPUTER SCIENCE</b> Pupils will use Scratch to create a simulation of a lighting and audio system for the multimedia broadcast created above. Pupils will first create a backdrop, then audio control simulation and lighting rig which they will program so that it has different lighting patterns and finally adding their audio from their broadcast above.</p> <p><b>Concepts</b> <b>NC</b> – Know how to design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts</p> <ul style="list-style-type: none"> <li>To know how to simulate the control within an audio system using selection, repetition and variables</li> <li>To know how to simulate a system using costumes</li> <li>To know how to use variables to extend a lighting pattern</li> </ul>



# Computing



Key Vocabulary	
Navigators 1 / Year 5	Navigators 2 / Year 6
Mission Control	A World of Bright Ideas
vector raster graphics traditional design artwork digital point pixels resolution grid layer blur shadow online platform web page collaboration share search search engine discerning evaluating operators	review assess feedback evaluate input variable command decomposition programming selection repetition loops event condition interact design develop game debug
The Rescuers (Term 2)	True Crime? (Term 2)
No Computing in this Project	No Computing in this Project
Go With The Flow (Term 2)	Time Team (Term 2)
No Computing in this Project	No Computing in this Project



# Computing



Key Vocabulary	
Navigators 1 / Year 5	Navigators 2 / Year 6
You're Not Invited	Wars of the World
floorplan sketch design bird's-eye view 2D 3D Program software CAD Computer-Aided graphic design plane horizontal vertical rotate	poster design social media hashtag manipulate copy paste word processing layout edit editing vector photo
Full of Beans	Global Warning
Windows Movie Maker iMovie movie sound visuals scene playback camera angles effect atmosphere editing transitions audio cut trim split text titles visual effects	Presentation slide transitions animation sound timing narration effects background hyperlink embed slide design word processing typing editing spellchecker columns heading font format layout photo editing



# Computing



Key Vocabulary	
Navigators 1 / Year 5	Navigators 2 / Year 6
Been Around the World (Term 5)	In Your Element (Term 5)
British Bulldog (Term 5)	Pharaoh Queen (Term 5)
Come Fly With Me! America (Term 6)	"I Have A Dream..." (Term 6)
data handling presentation bar chart graph photo album enhancements formula sum difference cell	broadcast Audacity soundtrack sound fx Garageband audio recording narration script sound audio visual engaging speech audience Scratch lighting physical system simulation backdrop control volume costume sprite





# Computing



## Safe Zone Skills Progression (Education for a Connected World)

Navigators 1 / Year 5		Navigators 2 / Year 6	
Self-Image and Identity	Online Relationships	Self-Image and Identity	Online Relationships
<p>I can explain how identity online can be copied, modified or altered.</p> <p>I can demonstrate how to make responsible choices about having an online identity, depending on context.</p>	<p>I can give examples of technology-specific forms of communication (e.g. <b>emojis</b>, <b>memes</b> and <b>GIFs</b>).</p> <p>I can explain 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.</p> <p>I can describe some of the ways people may be involved in online communities and describe how they might collaborate constructively with others and make positive contributions. (e.g. gaming communities or social media groups).</p> <p>I can explain how someone can get help if they are having problems and identify when to tell a trusted adult.</p> <p>I can demonstrate how to support others (including those who are having difficulties) online.</p>	<p>I can identify and critically evaluate online content relating to gender, race, religion, disability, culture and other groups, and explain why it is important to challenge and reject inappropriate representations online.</p> <p>I can describe issues online that could make anyone feel sad, worried, uncomfortable, or frightened. I know and can give examples of how to get help, both on and offline.</p> <p>I can explain the importance of asking until I get the help needed.</p>	<p>I can explain how sharing something online may have an impact either positively or negatively.</p> <p>I can describe how to be kind and show respect for others online including the importance of respecting boundaries regarding what is shared about them online and how to support them if others do not.</p> <p>I can describe how things shared privately online can have unintended consequences for others. e.g. <b>screen-grabs</b>.</p> <p>I can explain that taking or sharing inappropriate images of someone (e.g. embarrassing images), even if they say it is okay, may have an impact for the sharer and others; and who can help if someone is worried about this.</p>
Online Reputation	Online Bullying	Online Reputation	Online Bullying
<p>I can search for information about an individual online and summarise the information found.</p> <p>I can describe ways that information about anyone online can be used by others to make judgments about an individual and why these may be incorrect.</p>	<p>I can recognise online bullying can be different to bullying in the physical world and can describe some of those differences.</p> <p>I can describe how what one person perceives as playful joking and teasing (including <b>'banter'</b>) might be experienced by others as bullying.</p> <p>I can explain how anyone can get help if they are being bullied online and identify when to tell a trusted adult.</p> <p>I can identify a range of ways to report concerns and access support both in school and at home about online bullying.</p> <p>I can explain how to block abusive users.</p> <p>I can describe the <b>helpline services</b> which can help people experiencing bullying, and how to access them (e.g. Childline or The Mix).</p>	<p>I can explain the ways in which anyone can develop a positive online reputation.</p> <p>I can explain strategies anyone can use to protect their <b>'digital personality'</b> and online reputation, including degrees of <b>anonymity</b>.</p>	<p>I can describe how to capture bullying content as evidence (e.g. <b>screen-grab</b>, <b>URL</b>, <b>profile</b>) to share with others who can help me.</p> <p>I can explain how someone would report online bullying in different contexts.</p>





# Computing



## Safe Zone Skills Progression (Education for a Connected World)

Navigators 1 / Year 5		Navigators 2 / Year 6	
Managing Online Information	Health, Well-Being and Lifestyle	Managing Online Information	Health, Well-Being and Lifestyle
<p>I can explain the benefits and limitations of using different types of search technologies e.g. voice-activation search engine. I can explain how some technology can limit the information I am presented with e.g. voice-activated searching giving one result. I can explain what is meant by 'being <b>sceptical</b>'; I can give examples of when and why it is important to be 'sceptical'.</p> <p>I can evaluate digital content and can explain how to make choices about what is trustworthy e.g. differentiating between adverts and search results. I can explain key concepts including: information, reviews, fact, opinion, belief, validity, reliability and evidence.</p> <p>I can identify ways the internet can draw us to information for different agendas, e.g. website notifications, <b>pop-ups</b>, targeted ads.</p> <p>I can describe ways of identifying when online content has been commercially sponsored or boosted, (e.g. by commercial companies or by <b>vloggers, content creators, influencers</b>).</p> <p>I can explain what is meant by the term 'stereotype', how 'stereotypes' are amplified and reinforced online, and why accepting 'stereotypes' may influence how people think about others.</p> <p>I can describe how <b>fake news</b> may affect someone's emotions and behaviour, and explain why this may be harmful.</p> <p>I can explain what is meant by a '<b>hoax</b>'. I can explain why someone would need to think carefully before they share.</p>	<p>I can describe ways technology can affect health and well-being both positively (e.g. mindfulness apps) and negatively.</p> <p>I can describe some strategies, tips or advice to promote health and well-being with regards to technology.</p> <p>I recognise the benefits and risks of accessing information about health and well-being online and how we should balance this with talking to trusted adults and professionals.</p> <p>I can explain how and why some apps and games may request or take payment for additional content (e.g. <b>in-app purchases, loot boxes</b>) and explain the importance of seeking permission from a trusted adult before purchasing.</p>	<p>I can explain how search engines work and how results are selected and ranked.</p> <p>I can explain how to use search technologies effectively.</p> <p>I can describe how some online information can be opinion and can offer examples.</p> <p>I can explain how and why some people may present 'opinions' as 'facts'; why the popularity of an opinion or the personalities of those promoting it does not necessarily make it true, fair or perhaps even legal.</p> <p>I can define the terms 'influence', 'manipulation' and 'persuasion' and explain how someone might encounter these online (e.g. advertising and '<b>ad targeting</b>' and targeting for <b>fake news</b>).</p> <p>I understand the concept of <b>persuasive design</b> and how it can be used to influence people's choices.</p> <p>I can demonstrate how to analyse and evaluate the validity of 'facts' and information and I can explain why using these strategies are important.</p> <p>I can explain how companies and news providers target people with online news stories they are more likely to engage with and how to recognise this.</p> <p>I can describe the difference between on-line <b>misinformation</b> and <b>dis-information</b>.</p> <p>I can explain why information that is on a large number of sites may still be inaccurate or untrue. I can assess how this might happen (e.g. the sharing of misinformation or disinformation).</p> <p>I can identify, flag and report inappropriate content.</p>	<p>I can describe common systems that regulate age-related content (e.g. <b>PEGI, BBFC</b>, parental warnings) and describe their purpose.</p> <p>I recognise and can discuss the pressures that technology can place on someone and how / when they could manage this.</p> <p>I can recognise features of <b>persuasive design</b> and how they are used to keep users engaged (current and future use).</p> <p>I can assess and action different strategies to limit the impact of technology on health (e.g. <b>night-shift mode</b>, regular breaks, correct posture, sleep, diet and exercise).</p>





# Computing



Safe Zone Skills Progression (Education for a Connected World)			
Navigators 1 / Year 5		Navigators 2 / Year 6	
Privacy and Security	Copyright and Ownership	Privacy and Security	Copyright and Ownership
<p>I can explain what a <b>strong password</b> is and demonstrate how to create one.</p> <p>I can explain how many free apps or services may read and share private information (e.g. friends, contacts, <b>likes</b>, images, videos, voice, messages, <b>geolocation</b>) with others.</p> <p>I can explain what app permissions are and can give some examples.</p>	<p>I can assess and justify when it is acceptable to use the work of others.</p> <p>I can give examples of content that is permitted to be reused and know how this content can be found online.</p>	<p>I can describe effective ways people can manage passwords (e.g. storing them securely or saving them in the browser).</p> <p>I can explain what to do if a password is shared, lost or stolen.</p> <p>I can describe how and why people should keep their software and apps up to date, e.g. auto updates.</p> <p>I can describe simple ways to increase privacy on apps and services that provide privacy settings.</p> <p>I can describe ways in which some online content targets people to gain money or information illegally; I can describe strategies to help me identify such content (e.g. <b>scams</b>, <b>phishing</b>).</p> <p>I know that online services have <b>terms and conditions</b> that govern their use.</p>	<p>I can demonstrate the use of search tools to find and access online content which can be reused by others.</p> <p>I can demonstrate how to make references to and acknowledge sources I have used from the internet.</p>





# Computing



## Safe Zone Knowledge Progression (Education for a Connected World)

Navigators 1 / Year 5	Navigators 2 / Year 6
<p style="text-align: center;"><b>Lesson 1 – Privacy and Security</b></p> <p><b>Mission:</b>  <b>To understand the practice of changing passwords regularly, create strong passwords and understand privacy and permissions</b>            In this lesson, pupils will develop their knowledge of privacy and security by exploring permissions that websites and apps request (and the reasons they do so). Pupils will begin to understand terms and conditions and why it is important to not just blindly tick yes to everything on the internet. They will create new strong passwords containing random letters, numbers and symbols and build upon their knowledge of why it is important to change these regularly.</p> <p><b>Key Vocabulary</b>            permissions, data, accept, company, money, profit, password, strong, special character, share, secure</p>	<p style="text-align: center;"><b>Lesson 1 – Online Reputation &amp; Managing Online Information</b></p> <p><b>Mission:</b>  <b>To ensure your digital identity is protected and spot when something online might not be as it seems</b>            In this lesson, pupils will develop their knowledge of digital personality and why it is important to develop a positive one. They will look at how they can maintain a degree of anonymity online. Pupils will learn how to take practical steps to identify spam and how to identify, flag, report and block anything they deem suspicious, inappropriate or harmful. Pupils will assess their knowledge of Digital Citizenship via the Google Be Internet Legends game 'Interland'.</p> <p><b>Key Vocabulary</b>            digital personality, anonymity, anonymous, phishing, scam, spam, cyber-criminal, flag, report, block, grooming, harmful, inappropriate, identify, URL, secure, unsafe, well-being</p>
<p style="text-align: center;"><b>Lesson 2 – Self-Image and Identity</b></p> <p><b>Mission:</b>  <b>To update our avatar for online presence and demonstrate a positive online presence</b>            In this lesson, pupils will learn the difference between copying, modifying and altering information and the reasons why people do this online. They will learn how to ensure they keep their online identity safe, positive, and respectful, ensuring they think about their future when they post anything online. Pupils will then update their online avatars to a more recent likeness of themselves.</p> <p><b>Key Vocabulary</b>            copy, modify, alter, impersonate, parody, prank, bully, catfish, identity, avatar, safety, security, presence, represent, change</p>	<p style="text-align: center;"><b>Lesson 2 – Online Relationships &amp; Online Bullying</b></p> <p><b>Mission:</b>  <b>To debate whether the sharing of certain content online is okay</b>            In this lesson, pupils will explore different scenarios concerning sharing of content online and how they would deal with this. They will discuss and debate with each other, considering the consequences of certain decisions, actions, and reactions that they or others may make. They will look at how to protect their future by making intelligent informed decisions while communicating online.</p> <p><b>Key Vocabulary</b>            debate, decisions, actions, reactions, consequences, communication, historical, future, sharing</p>
<p style="text-align: center;"><b>Lesson 3 – Online Reputation &amp; Managing Online Information</b></p> <p><b>Mission:</b>  <b>Be sceptical and evaluate digital content before taking it as fact</b>            In this lesson, pupils will look at how the internet can be used to influence people, the reason this happens, and how they can be more aware of it. They will develop a knowledge of how companies can influence what you see online by using data to target posts to audiences, and use paid partnerships, boosted posts, sponsored ads, etc. Pupils will then use their Knowledge CHASERS skills to check the validity of the Safe Zone 'Paid Partnership' with Dog Island.</p> <p><b>Key Vocabulary</b>            influence, commercialism, advertising, sponsor, promote, monetise, cookies, information, product placement, tailor, developer, fact, fiction</p>	<p style="text-align: center;"><b>Lesson 3 –Self-Image and Identity</b></p> <p><b>Mission:</b>  <b>To understand and challenge stereotypes online</b>            In this lesson, pupils will learn what stereotypes are. They will learn about and discuss common stereotypes they may come across online. Pupils will be tasked with challenging their own stereotypes and they will investigate instances where people have broken down stereotypes. They will take part in a quiz that will help pupils recognise how gender stereotyping can impact them in their online spaces and encourage them to respect and celebrate differences.</p> <p><b>Key Vocabulary</b>            stereotype, belief, gender, race, disability, challenge, rights, difficulties, inspiration</p>



# Computing



## Safe Zone Knowledge Progression (Education for a Connected World)

### Navigators 1 / Year 5

#### Lesson 4 – Health, Well-Being and Lifestyle

**Mission:**

**To understand the effect technology can have on our health and well-being both positive and negative**

In this lesson, pupils will look at the positive and negative impact technology can have on their health and well-being and will look at steps they can take to look after themselves whilst using tech. Pupils will look at mindfulness and meditation apps or videos to see the positive effect technology can have on their health, well-being, and lifestyle. Pupils will then develop their knowledge of online purchasing and the effect this can have on our health. They will learn about loot boxes and other online offers and why these can be particularly risky.

**Key Vocabulary**

mindfulness, meditation, relaxation, awareness, focus, health, mental health, hormones, age-appropriate, access, support, guidance, loot box, online purchasing, chance, gambling, finance

#### Lesson 5 – Copyright and Ownership

**Mission:**

**To understand when online content can be reused and give examples**

In this lesson, pupils will learn more about the reuse of content online. They will understand that some content is available to reuse and that some creators actively encourage users to repost their content. Pupils will review the copyright and content sharing guidance of gaming companies and use these to create their own tutorials or information pages.

**Key Vocabulary**

reuse, sharing, content, ownership, fair dealing/use, breach, license, guidelines, attribution

#### Lesson 6 – Online Relationships & Online Bullying

**Mission:**

**To create an anti-cyberbullying video**

In this lesson, pupils will develop their knowledge of cyber-bullying and staying safe online. They will play the Think U Know Band Runner game where they face different online scenarios and must deal with them appropriately. They will then develop their knowledge of online relationships and online Bullying by watching a series of videos and researching using the internet. Finally, they will use this knowledge to create an anti-cyberbullying video for others to watch.

**Key Vocabulary**

communication, scenario, emoji, information, help, advice, trusted adult, cyberbullying

### Navigators 2 / Year 6

#### Lesson 4 – Health, Well-Being and Lifestyle & Managing Online Information

**Mission:**

**To understand the challenges we face while using technology and identify strategies to stay healthy**

In this lesson, pupils will delve deeper into the challenges we face whilst using technology, for example, persuasive design features and disinformation. They will understand that it is up to the user to make more informed choices about their behaviour and take control of their health and well-being. Pupils will create a list of advice for others on how to stay safe and healthy, whilst still being able to regularly access technology.

**Key Vocabulary**

Manipulation, persuasion, engagement, inappropriate, misinformation, disinformation, PEGI, restrictions, notifications, addiction

#### Lesson 5 & 6 – Privacy and Security & Copyright and Ownership

**Mission:**

**To understand good practice in terms of privacy and security and pass this on to others**

Over the course of these final two lessons, pupils will develop their knowledge of privacy and security, looking at security updates, privacy settings, phishing scams, and cyber-attacks, etc. A pupil-led activity will follow where children should demonstrate their knowledge of privacy and security, and copyright and ownership, by guiding others.

**Key Vocabulary**

passwords, cyber-attack, updates, settings, security, permissions, consent, protect, guide, help, advice



# Computing



## Composites and Components – Skills and Knowledge

Term 1 – That's All Folks!		
Year 3	Composites & Components	Components
	To know what animation is	To know that 'inanimate' means not having or showing the characteristics associated with life To know that to animate something simply means to bring it to life To know that animation occurs in various forms
	To understand the history of animation	To know that animation has developed over time, along with the development of technology To know that animation began as still drawings To know that a flipbook is a booklet with a series of images that very gradually change from one page to the next, so that when the pages are viewed in quick succession, the images appear to animate by simulating motion or some other change To know that animation developed from paper to screen To know that computer technology has created advancements in animation To know that animation is continually developing and may change again in the future
	To know some famous animations and how they are made	To know that Mickey Mouse is one of the most famous cartoon characters in the world To know that Walt Disney founded Walt Disney Studios To know that Walt Disney and Ub Iwerks created Mickey Mouse in 1928 To know that Wallace and Gromit are a set of characters, created by the animator Nick Park, along with the animation studio, Aardman animations To know other famous animations and be able to discuss likes and dislikes
	To know the different methods of animation	To know that the three most used types of animation are 2D, 3D and Stop Motion To know that 2D means two-dimensional, i.e. something that has two dimensions – length and width To know that 3D means three-dimensional, i.e. something that has three dimensions – width, height and depth (length) To know that 2D Animation is the art of creating movement in a two-dimensional picture To know that 2D animation is created using pencil / pen and paper or a computer / electronic device To know that 3D animation is the process of taking digital objects and making them come to life by creating the illusion that they're moving To know that 3D animation is created using advanced computer software To know that stop motion animation is created using a camera to take a sequence of pictures with models and props To know that in stop motion animation, objects are filmed frame-by-frame so that they appear as if they're moving when played back at normal speed
	To understand how to create a stop motion animation	To know how to take a photograph To know that one photograph in a stop motion animation is called a frame To know that frames are put together in succession to create the illusion of movement To know that animations are created in frames per second (fps) To know and use the tools within animation software / app such as clip, add frame, camera, duplicate, etc



# Computing



Term 3 – Athens V Sparta		
Year 3	Composites & Components	Components
	To understand the Trojan Horse and its history	To know that the Trojan Horse refers to a wooden horse said to have been used by the Greeks in the Trojan War To know that using the Trojan Horse helped the Greeks to enter the city of Troy and win the war To know that the Trojan Horse was said to have been used to deceive enemies, as the army hid inside
	Know that a Trojan Horse is a type of malware that causes harm to computers	To know that malware is a term to describe viruses, worms, and other malicious software used to gain access to sensitive information or interfere with a computer's performance To know that a Trojan Horse is the name of a type of malware To know that a Trojan Horse deceives users by appearing to be a harmless piece of software To know that Trojan Horses are known to create a backdoor on your computer that gives malicious users access to your system, possibly allowing confidential or personal information to be compromised (stolen) To know why Trojan Horses are dangerous
	To understand and use repetition within algorithms	To know that algorithms should be clear and unambiguous To know that repeat means that something happens or is done again To know that when something occurs again in an algorithm / program it is called a repeat / loop To know that a flowchart is a diagram of a sequence of functions / actions To know that algorithms can be represented as flowcharts To know how repetition is used in algorithms practically ( <i>Zorba's Dance</i> ) To know that repetition within instructions / algorithms can make them more succinct
	To understand the use of different inputs and begin to understand selection in programming	To know that an input is data that is entered into, or received by, a computer e.g. a user pressing a key on a keyboard, clicking a mouse or tapping a touch pad To know that some inputs indicate to the computer what we want it to do, while others provide data for the computer to process To know that inputs don't always have to be initiated by human beings e.g. sensors can be used as inputs To know that an output is how the computer presents the results of the input To know that outputs come in many forms e.g. text on a screen, printed materials, or as sound from a speaker To know that selection allows you to choose whether to run a section of code To know that selection allow you to choose to run code only IF / WHEN a certain condition is met
	To understand and use inputs, repetition and selection in programming	To know a variety of inputs and how to use these within block-based programming <i>To know that a control blocks can be used to with a variety of inputs in Scratch e.g. when clicked, when loudness, when pressed, etc.</i> To know that loops can be used to make code neater and clearer To know how to create repetition / loops within a program To know how to execute repetition / loops within a program To know how to use selection within a program



# Computing

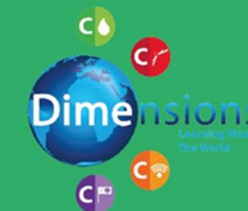


Term 4 – Under The Canopy		
Year 3	Composites & Components	
	Composites & Components	Components
To know how to select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information (NC)	To know how to record and analyse data using data logging devices	<p>To know that data is the word used to describe information</p> <p>To know that data can come in various forms, such as numbers, facts, observations, graphs, charts, measurements, etc.</p> <p>To know that data logging is the process of collecting, storing, and displaying data over time</p> <p>To know that data loggers are used in various industries and have many uses e.g. tracking supply and transportation activity, measuring temperature and humidity, monitoring environmental conditions in farms or greenhouses, reviewing the performance of technology</p> <p>To know that data logging can be completed manually, but predominantly data loggers, or artificial intelligence technologies, are used to collect data</p> <p>To know that a sensor on the data logger collects data</p> <p>To understand data loggers are often more accurate and efficient than human observation</p> <p>To understand the process of data logging: data collection / recording, processing, transfer, analysis</p> <p>To know how to use a data logger to collect data</p> <p>To know how to use the data collected to create graphs and charts for analysis</p>





# Computing



Year 3	Term 6 – Come Fly With Me! Africa		
	Composites & Components		Components
	<p>To know how to 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 (NC)</p> <p>To understand how to use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact (NC)</p>		<p>To know that information is knowledge or facts that come from a source</p> <p>To know that a poster is a sign made of paper or cardboard that is used for advertising, displaying information, or for decoration</p> <p>To know that layout is the arrangement of content on a page</p> <p>To know that typography is the practical art of arranging how the printed word appears on the page</p> <p>To know that captions are the words that describe a picture or graph, usually in a magazine, book, or newspaper</p> <p>To know the features of a good poster</p> <p>To know how to use the internet to search safely, with an awareness of copyright and ownership, whilst finding resources to use</p> <p>To understand that different colours can create different effects for a viewer</p> <p>To know how to use tools within publishing software for different purposes, such as editing font style, size and colour; creating different layouts, adding and editing pictures</p> <p>To know how to save and print (if needed) a final poster</p>





# Computing



Term 1 – Lightning Speed		
Year 4	Composites & Components	Components
	To understand that the computers in a school are connected together in a network	<p>To know that local means the nearby area</p> <p>To know that an area is a space</p> <p>To know that a network is a group of connected things or people</p> <p>To know that a Local Area Network (LAN) is a network of connected computers / devices in a specific area (<i>in this case, a school</i>)</p> <p>To know that devices can connect wirelessly to a network (without wires)</p> <p>To know that a server is a computer that is always left switched on that serves the network, a bit like waiter serving customers in a restaurant</p> <p>To know that a server serves the network by running programs (Scratch, Kodu, Internet browsers) which people wish to use; storing files created by users; allowing access to printing; allowing access to the Internet</p>
	To understand why computers are networked	<p>To know, in a network, that all the computers / devices are connected to a switch and a switch simply helps them connect together</p> <p>To know that devices on a network are called workstations</p> <p>To know that computer networks can overcome geographic barriers and enable the sharing of information</p> <p>To know that computer networks enable the usage and sharing of any number of applications and services, including emails, video, audio, and plenty of other types of data, over the internet</p>
	To understand the difference between the internet and the World Wide Web (WWW)	<p>To know that the internet is a massive network of connected computers and other devices across the globe</p> <p>To know that the internet is the largest network that exists</p> <p>To know that the world wide web ('www' or 'web' for short) is a collection of webpages found on the internet</p> <p>To know that a web browser uses the internet to access the world wide web.</p> <p>To know that Tim Berners-Lee invented the World Wide Web (WWW)</p>
	To understand that servers on the internet are located across the planet	<p>To know that a server is a computer that is always left switched on that serves the network</p> <p>To know there are servers on the Internet in different parts of the world, just like there was a server on our school network</p>
	To understand how email is sent across the internet	<p>To know that electronic mail, or 'email,' uses electronic devices to deliver messages</p> <p>To know that email uses the internet to send these messages</p> <p>To know the advantages of using emails e.g. efficiency, not using paper etc.</p> <p>To know the process an email goes through from composition to being received by the sender: type the email; press send from your email address with the domain name, e.g. @gmail.com, transfers to email domain name service provider to find the domain of the receiver; then the email is sent to the receiver once verified, email received by recipient</p>





# Computing



Term 3 – Law and Order	
Composites & Components	Components
<p>To know how to use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs (NC)</p> <p>To know how to design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts (NC)</p>	<p>To know how to create a 3D world within Kodu</p> <p>To know that 2D means two-dimensional, i.e. something that has two dimensions – length and width</p> <p>To know that 3D means three-dimensional, i.e. something that has three dimensions – width, height and depth (length)</p> <p>To know that Kodu Game Lab is a video game development platform developed by Microsoft to introduce young children to the basic concepts of computer programming</p> <p>To know that Kodu is a visual programming language (VPL) which teaches coding via simple visual elements</p> <p>To know that in Kodu you connect tiles containing underlying code to build 3D worlds and games without the need to master complex syntax and typing abilities</p> <p>To know how to use a range of tools within to create a 3D world within Kodu</p>
	<p>To know how to identify selection</p> <p>To know that selection allows you to choose whether to run a section of code</p> <p>To know that selection allow you to choose to run code only IF / WHEN a certain condition is met</p> <p>To know selection will most like include one of the words IF / THEN / WHEN / ELSE</p>
	<p>To understand and use selection in programming (<i>within Kodu</i>)</p> <p>To know that repeat within an algorithm means that something happens or is done again</p> <p>To know that when something occurs again in an algorithm / program it is called a repeat / loop</p> <p>To know that a flowchart is a diagram of a sequence of functions / actions</p> <p>To know that algorithms can be represented as flowcharts</p> <p>To know how repetition is used in algorithms practically (<i>Zorba's Dance</i>)</p> <p>To know that repetition within instructions / algorithms can make them clearer and more concise</p> <p>To know how to use selection to choose whether to run a section of code (<i>in Kodu</i>)</p> <p>To know how to use selection allow you to choose to run code only IF / WHEN a certain condition is met (<i>in Kodu</i>)</p>



# Computing



Term 4 – Picture Our Planet		
Year 4	Composites & Components	Components
	<p>To 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 (NC)</p> <p>To understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration (NC)</p> <p>To know how to use technology safely, respectfully and responsibly; recognise acceptable/ unacceptable behaviour; identify a range of ways to report concerns about content and contact (NC)</p>	<p>To know that photo editing is the process or art of enhancing photos to make them look more visually appealing</p> <p>To know that edits to photos are often called adjustments</p> <p>To know that photos can be edited in a variety of ways e.g. to adjust contrast and brightness, shadows and highlights, correct colours, crop or resize, retouch or restore images and for advertisement and marketing</p> <p>To know that photos are mainly edited electronically using photo editing software</p> <p>To know that photo editing software contains a variety of tools, blending modes, adjustments, and filters that can help to create a different atmosphere or effect in a photo</p> <p>To know and use the tools, blending modes, adjustments, and filters within photo editing software</p>
	<p>To understand email and be able to draft and send them</p>	<p>To know that the internet is a network, or system, that connects millions of computers worldwide</p> <p>To know that electronic mail, or 'email,' uses electronic devices to deliver messages</p> <p>To know that email uses the internet to send these messages</p> <p>To know the advantages of using emails e.g. efficiency, not using paper etc.</p> <p>To know how to type using a keyboard / touch screen</p> <p>To know that emails have a specific format / address and contain the @ symbol followed by a domain / organisation name</p> <p>To know that you can save emails in draft form</p> <p>To know that Cc means carbon copy and Bcc means blind carbon copy</p> <p>To know that carbon copy is produced when a sheet of carbon paper is placed between two sheets of writing paper – this was used before photocopying and email but is still used today</p> <p>To know and be able to use the functions of Send, Reply, Forward, To, Cc and Bcc</p>





# Computing



Term 6 – Cry Freedom		
Year 4	Composites & Components	
	Components	
<p>To know how to 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 (NC)</p> <p>To know how to use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content (NC)</p>	<p>To know how to create a quiz using a presentation program</p>	<p>To know how to generate questions</p> <p>To know that research is the process of finding facts / information in an organised manner</p> <p>To know that research can be completed using the internet</p> <p>To know how what a search engine is</p> <p>To know how to navigate to and use a search engine or given websites and find information</p> <p>To know how to pick out key information from a text</p> <p>To know that evaluate means to study carefully and judge</p> <p>To know that a presentation is a way of showing someone information</p> <p>To know what an on-screen presentation looks like</p> <p>To know that a slide is one page of a presentation</p> <p>To know how to navigate the internet or a given website in order to read and extract relevant information to use in a presentation</p> <p>To know how to type using a keyboard / touch screen</p> <p>To know to add text to presentation software</p> <p>To know how to locate and save an image</p> <p>To know how to import an image to presentation software</p> <p>To know how to play a slideshow on presentation software</p>





# Computing

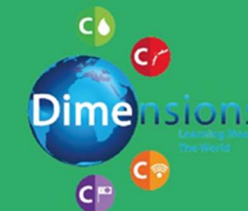


Term 1 – Mission Control		
Year 5	Composites & Components	
	Components	
	<p>To know how to select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information (NC)</p> <p>To know how to use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content (NC)</p>	<p>To understand and know how to create vector artwork</p> <p>To know how to use search technologies effectively</p>
	<p>To know that there are different types of art and design (e.g. pencil, paint, sculpture, textiles etc.)</p> <p>To know that recently there has been a rise in digital art / graphics</p> <p>To know that digital graphics come in two main forms – raster and vector</p> <p>To know that raster graphics are made up of tiny squares called pixels</p> <p>To know that vector graphics are created using mathematical formulas</p> <p>To know that a computer or device uses a mixture of lines and curves and the position of these on a grid to create a vector image</p> <p>To know that vector graphics can scale infinitely</p> <p>To know that raster graphics are typically used for digital photographs, scanned artwork or detailed digital artwork where they are many tones, shades and gradients of colour</p> <p>To know that vector graphics are commonly used for fonts, logos and branding</p> <p><i>(To study a vector art specialist – Michael Fugoso)</i></p> <p>To know that vector graphics are created using specific vector software / apps</p> <p>To know the process for creating vector graphics: sketch, layering flat shapes, adding textures</p> <p>To know the tools features within vector software and what they do e.g. pen tool, paths, shapes and objects, layers, gradients and shadows</p>	<p>To know the categories available on search engines such as Google and Bing e.g. web, images, video, etc.</p> <p>To know that there are different search tools available when searching for images e.g. size, colour, file type, etc.</p> <p>To know that search operators can help us refine searches</p> <p>To know how to use the search operators -, " ", and site:</p> <p>To know that the - operator excludes a term from a search result</p> <p>To know that the " " operator searches for exact quotes</p> <p>To know that the site: operator searches just the pages of a certain site</p>





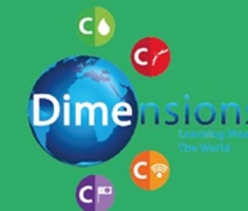
# Computing



Term 3 – You're Not Invited		
Year 5	Composites & Components	Components
	<p>To use technology safely, respectfully and responsibly; recognise acceptable / unacceptable behaviour; identify a range of ways to report concerns about content and contact (NC)</p> <p>To know how to 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 (NC)</p> <p>To understand and know how to use CAD (Computer-Aided Design)</p>	<p>To know how to navigate to and use a search engine or given websites and find information [about Roman Villas]</p> <p>To know how to print out any research conducted</p> <p>To know how to create a sketch / plan (of a Roman Villa), including annotations</p> <p>To know that annotation is the act or process of adding a note or notes to something</p> <p>To know how to create a 2D floor plan using drawing / paint software</p> <p>To know that Computer-Aided Design (CAD) is the use of computer software to help create, change, analyse or optimize designs</p> <p>To know the interface of a chosen CAD software, including the tools available and how to use them e.g. how to create 3D objects, how to create copies and curves, how to add materials, how to add images, and how to create floorplans</p> <p>To know how to create a final design of a product (Roman Villa) using CAD software</p>



# Computing



Term 4 – Full Of Beans		
Year 5	Composites & Components	Components
	<p>To know how to use video editing software to create a short movie clip</p>	<p>To know that a movie / video is a recording of an image or of moving images</p> <p>To know that a good video should be engaging</p> <p>To know about camera angles e.g. establishing shot, wide angle, medium angle, close up, low shot, high shot and panning shot</p> <p>To know that camera angles can be used to create different effects</p> <p>To know that video can be recorded using video cameras, digital cameras and cameras on most tablets / smartphones</p> <p>To know how to navigate the interface of the chosen app / software</p> <p>To know some of the different types of media / files that can be used as different elements within video editing software e.g. sound, images, video, music</p> <p>To know how to record a video using the device(s) available to your setting</p> <p>To know how to save video recordings</p> <p>To know how to import media into video editing software</p> <p>To know that duration is how long something lasts</p> <p>To know how to edit the duration of, trim, and split (into parts) media within video editing software</p> <p>To know that a transition within video editing software is the way one element changes into the next</p> <p>To know how to add transitions in video editing software</p> <p>To know how to record or upload sound files</p> <p>To know that sounds / music can create certain effects / atmospheres</p> <p>To know how to save sound recordings</p> <p>To know how to manipulate and edit sound recordings (if appropriate to your setting) in recording software, such as: Audacity or GarageBand or video recording / editing software</p> <p>To know how to add sound / audio (sound effects and voiceover) to video software</p> <p>To know how to add text / tiles in video software</p> <p>To know how to create visual effects in video software e.g. coloured overlays</p> <p>To know that the final video can be exported into different files qualities and shared with others</p>



# Computing



Term 6 – Come Fly With Me! America		
Year 5	Composites & Components	Components
	<p>To know how to 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 (NC)</p> <p>To use technology safely, respectfully and responsibly; recognise acceptable / unacceptable behaviour; identify a range of ways to report concerns about content and contact (NC)</p> <p>To know how to use spreadsheet software to collect, store, analyse and represent data</p>	<p>To know that data can come in various forms, such as numbers, facts, observations, graphs, charts, measurements, etc.</p> <p>To know that a spreadsheet is an electronic document displayed as a table or grid that consists of columns and rows that form cells</p> <p>To know that a graph is a diagram that visually represents data</p> <p>To know that data inputted spreadsheets can be used in calculations, and manipulated and analysed to create graphs and charts</p> <p>To know that spreadsheets are widely used for a variety of reasons e.g. record keeping, finance and budgeting</p> <p>To know that in schools, we often use spreadsheets to collect, analyse and display data from surveys or scientific investigations</p> <p>To know that columns of a spreadsheet are labelled alphabetically across the top (horizontally) starting at A</p> <p>To know that rows of a spreadsheet are labelled alphabetically down the left-hand side (vertically) starting at 1</p> <p>To know that columns and rows meet to create cells that can be referenced by joining the column letter and the row number together e.g. the cell where column C meets row 5 would be cell C5</p> <p>To know that the content of cells in a spreadsheet can contain a variety of formats, such as letters, numbers (including currency) and dates</p> <p>To know that cells can be formatted like the text in a word document e.g. changing the colour of the text or cell itself</p> <p>To know that the content of the cell can also be formatted e.g. if the cell contains a percentage, it can be displayed as a decimal or with the % symbol. If the cell contains a date, this can be displayed in different formats too.</p> <p>To know that to type in a cell you must click on it and press enter when finished or click on another cell</p> <p>To know that the bar along the top of a spreadsheet (Microsoft Excel) is called a formula bar</p> <p>To know that spreadsheets can use formulas and functions to perform calculations e.g. +, -, x, ÷, averages and percentages</p> <p>To know that a variety of graphs can be created using spreadsheet software e.g. bar, column, block, line, pie graphs / charts</p> <p>To know how to input data into spreadsheet software to create graphs</p>



# Computing

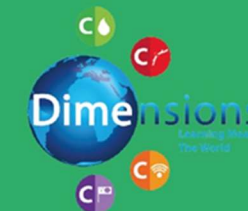


Term 1 – A World of Bright Ideas		
Year 6	Composites & Components	Components
	<p>To know how to design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts (NC)</p> <p>To know how to use sequence, selection, and repetition in programs, work with variables and various forms of input and output (NC)</p> <p>To know how to use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs (NC)</p>	<p>To know how to use variables and inputs within Scratch</p> <p>To know that an input is data that is entered into or received by a computer e.g. a user pressing a key on a keyboard, clicking a mouse or tapping a touch pad</p> <p>To know that some inputs indicate to the computer what we want it to do, while others provide data for the computer to process</p> <p>To know that inputs don't always have to be initiated by human beings e.g. sensors can be used as inputs</p> <p>To know a variety of inputs and how to use these within block-based programming</p> <p>To know that control blocks can be used to with a variety of inputs in Scratch e.g. when clicked, when loudness, when pressed, etc.</p> <p>To know that a variable is a value that can change in a program</p> <p>To know that variables can store numbers in a game - Scratch</p>
		<p>To understand how to use repetition and variables (<i>to create a scoring system</i>)</p> <p>To know that repetition / loops can be used to make code neater and more succinct</p> <p>To know how to create repetition / loops within a program</p> <p>To know how to execute repetition / loops within a program</p> <p>To know how to use variables within a program alongside repetition (<i>to create a scoring system</i>)</p>
		<p>To know how to design a numeracy game to include variables, selection and repetition</p> <p>To know the types of maths games available already</p> <p>To know the audience the game will be designed for</p> <p>To know what questions would be suitable for a maths game for a specific audience</p> <p>To know what the game is going to look like</p>
		<p>To know how to program (<i>the designed game</i>) using variables, selection and repetition</p> <p>To know that selection allows you to choose whether to run a section of code</p> <p>To know that selection allow you to choose to run code only IF / WHEN a certain condition is met</p> <p>To know selection will most like include one of the words IF / THEN / WHEN / ELSE</p> <p>To know how to use selection within a program</p> <p>To know that repetition / loops can be used to make code neater and more succinct</p> <p>To know how to create repetition / loops within a program</p> <p>To know how to execute repetition / loops within a program</p> <p>To know how to use variables, repetition and selection within a program</p> <p>To know that debugging is the process of finding and correcting errors in computer programs</p> <p>To know how to find errors in a program when they arise and how to correct them</p>





# Computing



Term 3 – Wars of the World		
Year 6	Composites & Components	Components
	<p>To know how to 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 (NC)</p> <p>To know how to use design software to create a poster</p>	<p>To know that information is knowledge or facts that come from a source</p> <p>To know that a poster is a sign made of paper or cardboard that is used for advertising, displaying information, or for decoration</p> <p>To know that layout is the arrangement of content on a page</p> <p>To know that typography is the practical art of arranging how the printed word appears on the page</p> <p>To know that captions are the words that describe a picture or graph, usually in a magazine, book, or newspaper</p> <p>To know what makes a good poster e.g. eye-catching, succinct, gets the message across, aesthetically pleasing</p> <p>To know that evaluate means to study carefully and judge</p> <p>To critically evaluate a range of posters</p> <p>To know how to use the internet to search safely, with an awareness of copyright and ownership, whilst finding resources to use</p> <p>To understand that different colours can create different effects for a viewer</p> <p>To know how to use tools within publishing software for different purposes, such as: editing font style, size and colour; creating different layouts, adding and editing pictures</p> <p>To know how to save and print (if needed) a final poster</p> <p>To know how to apply knowledge across different software to create different visual effects e.g. children could edit photos to import into their posters or import vector artwork they have created</p>





# Computing



## Term 4 -Global Warning

Year 6		Term 4 -Global Warming	
Composites & Components		Components	
To know how to 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 (NC)	To know how to use presentation software to create a digital presentation	<p>To know that a presentation is a way of showing someone information</p> <p>To know what an on-screen presentation looks like</p> <p>To know that a slide is one page of a presentation</p> <p>To know how to navigate the internet or a given website in order to read and extract relevant information to us in a presentation</p> <p>To know how to type using a keyboard / touch screen</p> <p>To know to add text to presentation software</p> <p>Know how to locate and save an image</p> <p>To know how to import an image to presentation software</p> <p>To know how to play a slideshow on presentation software</p> <p>To know that a transition within presentation software is the way one slide changes into the next</p> <p>To know that an animation within presentation software is the way an element on a slide come to life</p> <p>To know how to change, format, add and edit a presentation’s style, background, font, images, sounds</p> <p>To know how to add animations and transitions to a presentation</p> <p>To know that a powerful presentation captivates the audience, and also gets the message across</p> <p>To know how to create a succinct presentation that engages the audience</p> <p>To know how to apply knowledge across different software if using different presentation software from previous phases</p>	
	To know how to use word processing software to create a newspaper report	<p>To know that certain buttons on the keyboard have different functions and how to use these (i.e. shift, caps lock, space, enter)</p> <p>To know that formatted text is text that is displayed in a specific style</p> <p>To know how to change the format of text in word processing software / app (i.e. font, size, colour)</p> <p>To know how to import images into word processing software</p> <p>To understand the spell check function and that a red line usually shows there is an error</p> <p>To know that layout is the arrangement of content on a page</p> <p>To know that typography is the practical art of arranging how the printed word appears on the page</p> <p>To know that captions are the words that describe a picture or graph, usually in a magazine, book, or newspaper</p> <p>To know the keyboard shortcuts for copy (ctrl+c for windows, cmd+c for mac) and paste (ctrl+v for windows, cmd+v for mac)</p> <p>To know that newspapers are written in columns</p> <p>To know that columns are where the page is split into narrower vertical sections of text</p> <p>To know that columns can be used in word processing software</p> <p>To know how to use columns to create a newspaper layout</p> <p>To know how to apply knowledge across different software if using different word processing software from previous phases</p> <p>To know that different font sizes and styles are used for headlines and main text body in a newspaper</p> <p>To know that bold, underlined, and italics fonts are used to create different effects</p> <p>To know that the wrap text function enables you to place an image in different places on a document</p> <p>To know how to use the wrap text function to place pictures in a variety of styles (e.g. in front of text, behind text, tight, square etc) understanding the effect each of these styles have on the document</p> <p>To know that a header is text (or an image) that is placed at the top of a page, while a footer is placed at the bottom, or foot, of a page</p> <p>To know how to insert a header and footer into a document</p> <p>To know how to use a range of fonts and sizes for different effects</p> <p>To know how to apply knowledge across different software to create different visual effects e.g. children could edit photos to import into their newspaper reports</p>	



# Computing



## Term 6 – I Have a Dream...

Year 6	Composites & Components		Components	
	To know how to 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 (NC) To know how to design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts (NC)	To know how to create a multimedia broadcast	To know that broadcasting is sending information (such as television shows or music) electronically to an audience To know that a script is the written text of a play, film, or broadcast To know that a jingle is a short slogan, verse, or tune designed to be easily remembered To know how to write a script for a radio / podcast episode (including a jingle) To know how to record sound To know how to save sound recordings To know how to manipulate and edit sound recordings (if appropriate to your setting) in recording software, such as Audacity or GarageBand To know how to create a slideshow of photographs (using iMovie or similar) To know how to add sound effects in recording / video editing software To know how to add soundtracks in recording / video editing software	
		To know how to simulate control within an audio system using selection, repetition and variables	To know that repetition / loops can be used to make code neater and more succinct To know how to create repetition / loops within a program To know how to execute repetition / loops within a program To know that selection allows you to choose whether to run a section of code To know that selection allow you to choose to run code only IF / WHEN a certain condition is met To know selection will most like include one of the words IF / THEN / WHEN / ELSE To know how to use selection within a program To know that a simulation is a way of seeing a thing happen without it actually taking place in reality To know that physical systems include robotics, motors and sensors e.g. streetlights, remote controls, traffic lights, burglar alarms, air conditioning systems, automatic doors, etc. To know what physical systems they have around them e.g. in school, at home, etc. To know how to recreate a physical system (using Scratch)	
		To know how to simulate a system using costumes	To know what a backdrop is and how to add one – Scratch To know the variety of editing tools within scratch to create a backdrop e.g. pencil, line, ellipse, eraser tool, etc. To know that a sprite is an image that can be programmed to move, respond to events, and interact with other sprites To know how to import music / sound into Scratch To know that the volume is how loud or quiet a sound is To know that a costume is a still image that can be put in sequence with another costume to simulate movement / change e.g. flashing lights	
		To know how to use variables to extend a lighting pattern in Scratch	To know that a broadcast message is a signal which can be transmitted and received by all sprites and it is a way of creating programs such that the actions of one sprite affects the programs of other sprites To know that a variable is a value that can change in a program To know how to use variables, repetition, and selection within a program To know that debugging is the process of finding and correcting errors in computer programs To know how to find errors in a program when they arise and how to correct them	

## Composites and Components – Skills and Knowledge



# Computing



## Safe Zones – All Year groups

LESSON 1	
Composites & Components	Components
<p><b>Year 3</b></p> <p><b>EDUCATION FOR A CONNECTED WORLD OBJECTIVES</b></p> <p><b>SELF-IMAGE AND IDENTITY</b></p> <p>To explain what is meant by the term 'identity'</p> <p>To explain how people can represent themselves in different ways online</p> <p>To explain ways in which someone might change their identity depending on what they are doing online. (e.g. gaming; using an avatar; social media) and why</p>	<p>To know that identity means who you are, the way you think about yourself, the way you are viewed by the world and the characteristics that define you</p> <p>To know what information you might have on an identity card</p> <p>To know what types of information might be stored about yourself online</p> <p>To know that it is important to not give away too much of your identity online to keep you safe</p> <p>To know that other people's identities online can be different to their identities in real-life</p> <p>To describe ways in which people might make themselves look different online e.g. avatars, fake pictures etc.</p> <p>To know that an avatar is useful to show people aspects of your personality, but not give away too much information about yourself</p> <p>To know that honesty is when you speak the truth and act truthfully</p> <p>To know that it is important to be honest both online and offline</p> <p>To know that someone might want to change their identity online for many reasons – some good, some bad e.g. safety / discretion, scamming etc.</p> <p>To know that it is difficult to know someone's true identity when communicating with them online</p>



# Computing



## LESSON 2

Composites & Components		Components
<p><b>EDUCATION FOR A CONNECTED WORLD OBJECTIVES</b></p> <p><b>ONLINE RELATIONSHIPS</b>          To describe ways people who have similar likes and interests can get together online.          To explain what it means to 'know someone' online and why this might be different from knowing someone offline.          To explain what is meant by 'trusting someone online', why this is different from 'liking someone online', and why it is important to be careful about who to trust online including what information and content they are trusted with.          To explain how someone's feelings can be hurt by what is said or written online.          To explain the importance of giving and gaining permission before sharing things online; how the principles of sharing online is the same as sharing offline e.g. sharing images and videos. what is meant by the term 'identity'          To explain how people can represent themselves in different ways online          To explain ways in which someone might change their identity depending on what they are doing online. (e.g. gaming; using an avatar; social media) and why</p> <p><b>ONLINE BULLYING</b>          To describe appropriate ways to behave towards other people online and why this is important          To give examples of how bullying behaviour could appear online and how someone can get support</p>	<p>I can describe ways people who have similar likes and interests can get together online.</p>	<p>To know that communicate means to exchange thoughts, ideas, or information          To know that we can communicate with people online and offline          To know that we can communicate in a variety of different ways e.g. verbally, text, video, body language, etc.          To know that when we communicate with people who have similar likes and interests online, we have things in common and often use a shared vocabulary          To know that we may communicate with strangers online and should be wary of this          To know that you may meet people online who share similar interests to you e.g. through gaming etc          To know that people online and offline can be treat you in different ways e.g. being kind, sarcastic, mean, friendly, etc          To know and explain some risks of communicating online with others I don't know very well</p>
	<p>I can explain what it means to 'know someone' online and why this might be different from knowing someone offline.</p>	<p>To know that knowing someone offline is different to knowing someone online          To know why it is different e.g. not face to face, might not be sharing true identity etc          To know that it is better to communicate with people you know in the real world online          To know that you should always gain permission from a trusted adult if you would like to communicate with someone you do not know in the real world</p>
	<p>I can explain what is meant by 'trusting someone online', why this is different from 'liking someone online', and why it is important to be careful about who to trust online including what information and content they are trusted with.</p>	<p>To know that honesty is when you speak the truth and act truthfully          To know that it is important to be honest both online and offline          To know that someone might want to change their identity online for many reasons – some good, some bad e.g. safety / discretion, scamming etc.          To know that it is difficult to know someone's true identity when communicating with them online          To know that people communicating online might not be being honest and truthful e.g. they might be looking to gain access to personal information</p>
	<p>I can explain why someone may change their mind about trusting anyone with something if they feel nervous, uncomfortable or worried.</p>	<p>To know different examples of things that might make you feel sad, worried, uncomfortable, or frightened online e.g. unkind / inappropriate comments, age-inappropriate content          To know that you can ask for help          To know how to ask for help          To know who to speak to when you need help / support e.g. trusted adults          To know that it is okay to change your mind about trusting someone if you feel nervous, uncomfortable or worried          To know how to deal with situations that make you feel uncomfortable online e.g. speaking to a trusted adult</p>
	<p>I can explain how someone's feelings can be hurt by what is said or written online.</p>	<p>To know that hurt means unhappiness or sadness caused by someone's words or actions          To know that you can be hurt or upset by things that are said to you          To know that you can be hurt or upset by things said to you online          To know what to do if you have been hurt or upset by something online e.g. speaking to a trusted adult          To know that if we comment in a digital space, we should always try to be respectful, just as we would offline</p>
	<p>I can explain the importance of giving and gaining permission before sharing things online; how the principle of sharing online is the same as sharing offline e.g. sharing images and videos.</p>	<p>To know that permission is the act of allowing someone to do something          To know that you should gain permission and / or give permission before sharing things online          To know that you should always gain permission from a trusted adult if you would like to communicate with someone you do not know in the real world          To know that the principles of sharing in the real world should exist in the online world, too e.g. sharing an image</p>
	<p>I can describe appropriate ways to behave towards other people online and why this is important.</p>	<p>To know that if we comment in a digital space, we should always try to be respectful as we would offline          To know that our behaviour can affect how others feel online e.g. if we make a kind comment, they could feel good, and a negative comment could make them feel bad          To know there are different ways communicate in a school's digital space e.g. posts, comments, messages, forums, video calls, gifs, images          To know to post on a school blog / digital space          To know how to comment on a blog post / school digital space</p>
	<p>I can give examples of how bullying behaviour could appear online and how someone can get support.</p>	<p>To know that bullying is persistent physical or mental abuse          To know that a bully is someone who engages in persistent and repeated physical and mental abuse          To know some examples of bullying behaviour and how it could look online e.g. mean comments, etc.          To know the difference between accidental and intentional          To know where bullying can happen online e.g. online gaming chat, WhatsApp, social media, etc.          To understand how bullying can make someone feel e.g. scared, lonely, upset, anxious, hated          To know some of the signs that someone might be being bullied e.g. become withdrawn, quiet, sad          To know that someone experiencing bullying is not to blame and they must not feel that way          To know how someone can / would get help about being bullied online or offline          To know that you should always try your best to help someone if you feel they are being bullied          To know that it is the right thing to do to report bullying to a trusted adult          To know that if you are upset or worried about something online you should talk to a trusted adult          To know and name different people who you could ask for help and support          To know that children do not have to fix problems on their own</p>



# Computing



## LESSON 3

### Composites & Components

### Components

**ONLINE REPUTATION**  
To explain how to search for information about others online  
To give examples of what anyone may or may not be willing to share about themselves online. I can explain the need to be careful before sharing anything personal  
To explain who someone can ask if they are unsure about putting something online

**MANAGING ONLINE INFORMATION**  
To demonstrate how to use key phrases in search engines to gather accurate information online  
To explain what autocomplete is and how to choose the best suggestion  
To explain how the internet can be used to sell and buy things  
To explain the difference between a 'belief', an 'opinion' and a 'fact'. and can give examples of how and where they might be shared online, e.g. in videos, memes, posts, news stories etc  
To explain that not all opinions shared may be accepted as true or fair by others (e.g. monsters under the bed)  
To describe and demonstrate how we can get help from a trusted adult if we see content that makes us feel sad, uncomfortable worried or frightened

I can explain how to search for information about others online.

I can explain why it is important to always ask a trusted adult before sharing any personal information online, belonging to myself or others.

I can give examples of what anyone may or may not be willing to share about themselves online.

I can explain the need to be careful before sharing anything personal.

I can demonstrate how to use key phrases in search engines to gather accurate information online.

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

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

I can explain the difference between a 'belief', an 'opinion' and a 'fact'. and can give examples of how and where they might be shared online, e.g. in videos, memes, posts, news stories etc.

I can explain that not all opinions shared may be accepted as true or fair by others (e.g. monsters under the bed).

I can describe and demonstrate how we can get help from a trusted adult if we see content that makes us feel sad, uncomfortable worried or frightened.

To know that research is the process of finding facts / information in an organised manner  
To know that you can use the internet to research  
To know that a search engine can help us find things out online e.g. Google, Kiddle  
To know what a search engine is  
To know that you can search for information about yourself online by inputting details, such as your name  
To know that you can search for information about others online

To know that trusted adults can help keep us safe  
To know that it is important to speak to a trusted adult before sharing personal information so you do not give away anything that could affect your (or someone else's) safety

To know that a digital footprint shows examples of where information about us exists online  
To know that you need to be careful before sharing anything about yourself or others online  
To know some examples of what anyone may or may not be willing to share about themselves online  
To know that certain people may want to use your information for their gain e.g. hackers

To know how to type keywords into a search engine  
To know how to navigate to and use a search engine or given websites and find information  
To know how to pick out key information from a text  
To know how to use functions such as home, forward, back buttons, links, tabs, and sections  
To know how to accurately use key words and phrases to find correct information

To know that autocomplete is a feature in which an application predicts the rest of a word that a user is typing  
To know that autocomplete is meant to help save time  
To know that autocomplete might not always suggest exactly what you want  
To know that autocomplete may give you suggestions on what to search for  
To know that you must choose the correct suggestion to get the best search results  
To know that it is important not to rely too much on autocomplete

To know that you can make purchases online (e.g. when gaming, or online shopping) and how this affects our digital footprint

To know that facts are statements that we know to be true  
To know that opinions are your beliefs about something and might not be true for everyone  
To know that a belief is a firm thought that something is true  
To know that facts, opinions and beliefs are all on the internet and it is important to know the difference between the three  
To know that opinions, facts, and beliefs can be seen in many forms online e.g. webpages, blogs, videos, memes, posts, news stories etc.

To know that things you find online might not be true  
To know that not everyone has to agree with your opinion and vice versa  
To know that some people might disagree over opinions

To know that people may make mean comments in your online space  
To know that you should ask for help if something has upset you, both online and offline  
To know that there are people you can speak to if you need help (e.g. a trusted adult)  
To know how to explain to others how they can get help if they need it

EDUCATION FOR A CONNECTED WORLD OBJECTIVES

Year 3



# Computing



## LESSON 4

Year 3	LESSON 4	
	Composites & Components	Components
	<p><b>EDUCATION FOR A CONNECTED EDUCATION FOR A CONNECTED WORLD OBJECTIVES</b></p> <p><b>HEALTH, WELL-BEING AND LIFESTYLE</b></p> <p>To explain why spending too much time using technology can sometimes have a negative impact on anyone, e.g. mood, sleep, body, relationships; I can give some examples of both positive and negative activities where it is easy to spend a lot of time engaged (e.g. doing homework, games, films, videos)</p> <p>To explain why some online activities have age restrictions, why it is important to follow them and know who I can talk to if others pressure me to watch or do something online that makes me feel uncomfortable (e.g. age restricted gaming or web sites)</p>	<p>To know how technology can have a positive impact on you</p> <p>To know how technology can have a negative impact on you</p> <p>To know how to identify how much time you spend using technology</p> <p>To know if technology has ever made you feel anxious, angry, sad, etc</p> <p>To know that rage quitting is when a player in sports or video gaming is too angry to continue playing a game and usually leaves before the end of the game or match</p> <p>To know that time spent using technology could often be spent building relationships offline</p> <p>To know that technology can be both a positive and negative distraction</p> <p>To know that technology can sometimes take all your concentration</p> <p>To know some examples of where it is easy to lose track of time when engaged with technology</p> <p>To know that many devices have screentime trackers that can help guide us on how much time we spend using devices</p> <p>To know that the blue light emitted from devices makes it difficult for us to switch off and go to sleep</p> <p>To know that some games, apps, films, etc, have age restrictions</p> <p>To know that age restrictions are in place to protect children e.g. from seeing inappropriate content, from marketeers, etc</p> <p>To know that you can speak to a trusted adult if someone tries to pressure you to watch or do something online that you are not comfortable with</p>



# Computing



LESSON 5		
Year 3	Composites & Components	Components
	<p><b>EDUCATION FOR A CONNECTED WORLD OBJECTIVES</b></p> <p><b>PRIVACY AND SECURITY</b></p> <p>To describe simple strategies for creating and keeping passwords private</p> <p>To give reasons why someone should only share information with people they choose to and can trust</p> <p>To explain that if they are not sure or feel pressured then they should tell a trusted adult</p> <p>To describe how connected devices can collect and share anyone's information with others</p>	<p>To know that we can use passwords to help protect our personal information online</p> <p>To know that we can store passwords securely to protect our accounts</p> <p>To know that some passwords are stronger than others</p> <p>To know what constitutes a good password e.g. mixture of words, symbols, numbers and upper and lower case</p> <p>To know that some passwords can be easily guessed</p> <p>To know that passwords should not contain personal information so that they cannot be guessed easily</p>
	<p>I can describe simple strategies for creating and keeping passwords private.</p>	<p>To know that it is important to have measures in place to ensure personal information is not given away e.g. parental controls, talking about what to share, etc</p> <p>To know how different types of information can be shared e.g. photo, video, text</p> <p>To know what information should be kept private and what is okay to share</p> <p>To know to speak to a trusted adult before posting anything, especially if you are unsure whether you should post it</p> <p>To know that personal information can be used by others for their gain e.g. hackers, advertisers</p> <p>To know that passwords should be kept private to prevent anyone accessing your information / content and that only trusted adults should be able to share these e.g. school teachers knowing school account passwords, parents knowing passwords at home to keep you safe</p>
	<p>I can give reasons why someone should only share information with people they choose to and can trust.</p>	
	<p>I can explain that if they are not sure or feel pressured then they should tell a trusted adult.</p>	
	<p>I can describe how connected devices can collect and share anyone's information with others.</p>	<p>To know that we sometimes give devices permission to share personal information with others when we accept terms and conditions</p> <p>To know that these devices can collect our information</p>
LESSON 6		
Year 3	Composites & Components	Components
	<p><b>EDUCATION FOR A CONNECTED WORLD OBJECTIVES</b></p> <p><b>COPYRIGHT AND OWNERSHIP</b></p> <p>To explain why copying someone else's work from the internet without permission isn't fair and can explain what problems this might cause.</p>	<p>To know that the content found on a webpage of a company will belong to the company and not necessarily the person who created it (an employee)</p> <p>To know that you can use something that does not necessarily belong to you (e.g. a school pencil)</p> <p>To know that if you copy something and say it is yours, it doesn't mean it is</p> <p>To know that it is easy to copy things that are online (e.g. screenshot, download, copy and paste)</p> <p>To know that it is not okay to copy someone's work / content and say it is your own</p> <p>To know that when searching online, most of the content we find belongs to someone else</p> <p>To know that copying someone else's work from the internet without permission can cause problems</p> <p>To know what those problems might be e.g. copyright infringement, upset, taking someone's hard work, etc.</p> <p>To know that there are different types of content / images available on the internet which may have different copyright licenses i.e. some are free to use; some have copyright licences available to purchase so you can use them; some are free to use for certain things like education or news reporting, but it is important to check; some you are unable to copy at all</p> <p>To know how to find out about these licenses (Google Image search tools)</p> <p>To know whether you can use someone's content e.g. Creative Commons</p>



# Computing



## LESSON 1

### Composites & Components

### Components

ONLINE RELATIONSHIPS  
To describe strategies for safe and fun experiences in a range of online social environments (e.g. livestreaming, gaming platforms).  
To give examples of how to be respectful to others online and describe how to recognise healthy and unhealthy online behaviours.  
To explain how content shared online may feel unimportant to one person but may be important to other people's thoughts feelings and beliefs.

ONLINE BULLYING  
To recognise when someone is upset, hurt or angry online.  
To describe ways people can be bullied through a range of media (e.g. image, video, text, chat).  
To explain why people need to think carefully about how content they post might affect others, their feelings and how it may affect how others feel about them (their reputation).

I can describe strategies for safe and fun experiences in a range of online social environments (e.g. livestreaming, gaming platforms).

I can give examples of how to be respectful to others online and describe how to recognise healthy and unhealthy online behaviours.

I can explain how content shared online may feel unimportant to one person but may be important to other people's thoughts feelings and beliefs.

I can recognise when someone is upset, hurt or angry online.

I can describe ways people can be bullied through a range of media (e.g. image, video, text, chat).

I can explain why people need to think carefully about how content they post might affect others, their feelings and how it may affect how others feel about them (their reputation).

To know why it is beneficial to spend time relaxing  
To know how to use spare time productively to help relax and enjoy doing something positive, and give examples  
To know what it means to be safe online  
To know what you can do online for fun and give examples of these e.g. gaming  
To know that livestreaming is broadcasting to an audience in 'real time' online  
To know that we should take precautions to stay safe when communicating online, just as we would offline

To know that respect means that you have due regard for the feelings, wishes, and rights of others  
To know that considerate means to be thoughtful towards the rights and feelings of others  
To know that kindness is the quality of being friendly, generous, and considerate  
To know that treating people with kindness, consideration and respect is likely to make them feel good  
To know how it is possible to be respectful online  
To know that healthy choices make us, or others, feel good and unhealthy choices are likely to make us feel bad  
To know, and give examples of, healthy and unhealthy online behaviours

To know that not everyone thinks the same  
To know that people have different thoughts, feelings and beliefs and we must respect these  
To know that people have different likes and dislikes  
To know that we must be aware that content shared online might be seen in a different light by others e.g. something they find funny might not be taken in the same way by someone else

To know if technology has ever made you feel anxious, angry, sad, etc  
To know what it might look like when someone is upset, hurt or angry online  
To know that rage quitting is when a player in sports or video gaming is too angry to continue playing a game and usually leaves before the end of the game or match  
To know that bullying behaviour can make someone feel upset, hurt or angry online and offline

To know the difference between accidental and intentional behaviour  
To know where bullying can happen online e.g. online gaming chat, WhatsApp, social media, etc. To understand how bullying can make someone feel e.g. scared, lonely, upset, anxious, hated  
To know some of the signs that someone might be being bullied e.g. become withdrawn, quiet, sad  
To know that someone experiencing bullying is not to blame and they must not feel that way  
To know how someone can / would get help about being bullied online or offline  
To know that you should always try your best to help someone if you feel they are being bullied  
To know that it is the right thing to do to report bullying to a trusted adult  
To know that if you are upset or worried about something online you should talk to a trusted adult  
To know and name different people who you could ask for help and support  
To know that children do not have to fix problems on their own

To know that a post is a message, such as text or photos, published online by a user while referring to a message board, comment section, or social network  
To know that you can post a variety of content online  
To know that what you post online will be seen by others  
To know that people may make judgements about you based on what you post online  
To know that we must think about others before posting / saying anything online



# Computing



Year 4	LESSON 2		
	Composites & Components		Components
	EDUCATION FOR A CONNECTED WORLD OBJECTIVES  HEALTH, WELL-BEING AND LIFESTYLE  To explain how using technology can be a distraction from other things, in both a positive and negative way. To identify times or situations when someone may need to limit the amount of time they use technology e.g. I can suggest strategies to help with limiting this time.	I can explain how using technology can be a distraction from other things, in both a positive and negative way.	To know that technology can be both a positive and negative distraction To know that technology can sometimes take all your concentration To know some examples of where it is easy to lose track of time when engaged with technology To know some examples of using technology positively To know some examples of using technology negatively
I can identify times or situations when someone may need to limit the amount of time they use technology e.g. I can suggest strategies to help with limiting this time.		To know that the recommended screen time for children aged 5 to 16 is two hours To know how to identify how much time you spend using technology To know that many devices have screentime trackers that can help guide us on how much time we spend using devices To know the long-term effects, both physically and mentally, of spending too much time using technology To recognise when someone might need to limit their time spent using technology	
Year 4	LESSON 3		
	Composites & Components		Components
	EDUCATION FOR A CONNECTED WORLD OBJECTIVES  ONLINE REPUTATION To describe how to find out information about others by searching online. To explain ways that some of the information about anyone online could have been created, copied or shared by others.  MANAGING ONLINE INFORMATION To analyse information to make a judgement about probable accuracy and I understand why it is important to make my own decisions regarding content and that my decisions are respected by others. To describe how to search for information within a wide group of technologies and make a judgement about the probable accuracy (e.g. social media, image sites, video sites). To 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. To explain why lots of people sharing the same opinions or beliefs online do not make those opinions or beliefs true. To explain that technology can be designed to act like or impersonate living things (e.g. bots) and describe what the benefits and the risks might be. To explain what is meant by fake news e.g. why some people will create stories or alter photographs and put them online to pretend something is true when it isn't.	I can describe how to find out information about others by searching online.	To know how to navigate to and use a search engine or given websites and find information To know that you can search for information about yourself online To know that you can search for information about others online To know how to explain to others how to search online safely
I can explain ways that some of the information about anyone online could have been created, copied or shared by others.		To know that, when searching online, most of the content we find belongs to someone else To know that anyone can post online and not everything created is necessarily true or accurate	
I can analyse information to make a judgement about probable accuracy and I understand why it is important to make my own decisions regarding content and that my decisions are respected by others.		To know how to analyse the validity of an online source (Knowledge CHASERS) To know that it important to form your own opinions and not just accept what you see as true	
I can describe how to search for information within a wide group of technologies and make a judgement about the probable accuracy (e.g. social media, image sites, video sites).		To know that, especially on social media, people can present information as facts when they may not necessarily be true To know how to use a range of search technologies to find information To know how to corroborate the accuracy of information by comparing sources	
I can explain why lots of people sharing the same opinions or beliefs online do not make those opinions or beliefs true.		To know that facts are statements that we know to be true To know that opinions are your beliefs about something and might not be true for everyone To know that a belief is a firm thought that something is true To know that facts, opinions and beliefs are all on the internet and it is important to know the difference between the three To know that opinions, facts, and beliefs can be seen in many forms online e.g. webpages, blogs, videos, memes, posts, news stories etc To know that things you find online might not be true To know that not everyone has to agree with your opinion and vice versa To know that some people might disagree over opinions To know that just because lots of people are saying a certain thing, it doesn't necessarily mean it's true	
I can explain that technology can be designed to act like or impersonate living things (e.g. bots) and describe what the benefits and the risks might be.		To know that fake news can be spread by hackers / bots To know that we must be careful when dealing with technology so that we are not tricked by fake accounts / bots	
I can explain what is meant by fake news e.g. why some people will create stories or alter photographs and put them online to pretend something is true when it isn't.		To know that fake news is news or stories on the internet that are not true To know that fake news is often created to spread strong and often prejudice opinions To know that people may manipulate photos for a number of reasons e.g. parody, to spread false information	



# Computing



Year 4	LESSON 4		
	Composites & Components		Components
	<b>EDUCATION FOR A CONNECTED WORLD OBJECTIVES</b>  <b>SELF-IMAGE AND IDENTITY</b> To explain how my online identity can be different to my offline identity. To describe positive ways for someone to interact with others online and understand how this will positively impact on how others perceive them. To explain that others online can pretend to be someone else, including my friends, and can suggest reasons why they might do this.	I can explain how my online identity can be different to my offline identity.	To know that it is important to not give away too much of your identity online in order to stay safe To know that other people's identities online can be different to their identities in real-life I can describe ways in which people might make themselves look different online e.g. avatars, fake pictures etc. To know that an avatar is useful to show people aspects of your personality, but not give away too much information about yourself
		I can describe positive ways for someone to interact with others online and understand how this will positively impact on how others perceive them.	To know that honesty is when you speak the truth and act truthfully To know that it is important to be honest both online and offline To know how to positively interact with others both online and offline To know that people will perceive you differently depending on how you behave towards them To know how to make good choices when interacting with others both online and offline
		I can explain that others online can pretend to be someone else, including my friends, and can suggest reasons why they might do this.	To know that impersonation means to pretend to be another person To know that someone might want to change their identity online for many reasons – some good, some bad e.g. safety / discretion, scamming etc. To know that it is difficult to know someone's true identity when communicating with them online
Year 4	LESSON 5		
	Composites & Components		Components
	<b>EDUCATION FOR A CONNECTED WORLD OBJECTIVES</b>  <b>COPYRIGHT AND OWNERSHIP</b> 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. To give some simple examples of content which I must not use without permission from the owner, e.g. videos, music, images.	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.	To know that reuse of digital content is when someone takes and uses a part of, or a whole piece of digital content in their own work To know that it is not okay to copy someone's work / content and say it is your own To know that when searching online, most of the content we find belongs to someone else To know that copying someone else's work from the internet without permission can cause problems To know what those problems might be e.g. copyright infringement, upset, taking someone's hard work, etc To know whether you can use someone's content e.g. Creative Commons
		I can give some simple examples of content which I must not use without permission from the owner, e.g. videos, music, images.	To know that there are different types of content / images available on the internet which may have different copyright licenses i.e. some are free to use; some have copyright licences available to purchase so you can use them; some are free to use for certain things like education or news reporting, but it is important to check; some you are unable to copy at all To know how to find out about these licenses (Google Image search tools) To know some examples of content you cannot reuse without permission



# Computing

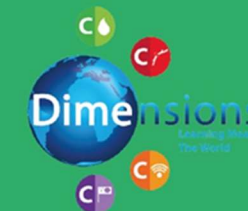


LESSON 6		
<p><b>Year 4</b></p> <p><b>EDUCATION FOR A CONNECTED WORLD OBJECTIVES</b></p> <p><b>PRIVACY AND SECURITY</b></p> <p>To describe strategies for keeping personal information private, depending on context.</p> <p>To explain that internet use is never fully private and is monitored, e.g. adult supervision.</p> <p>To describe how some online services may seek consent to store information about me; I know how to respond appropriately and who I can ask if I am not sure.</p> <p>To know what the digital age of consent is and the impact this has on online services asking for consent.</p>	Composites & Components	Components
	I can describe strategies for keeping personal information private, depending on context.	<p>To know that it is important to have support in place to ensure personal information is not given away e.g. parental controls, talking about what to share, etc.</p> <p>To know that private means only for one person or group and not for everyone</p> <p>To know what information should be kept private and what is okay to share</p> <p>To know to speak to a trusted adult before posting anything, especially if you are unsure whether you should post it</p> <p>To know that there are times when things should not be kept private e.g. if someone is unsafe</p>
	I can explain that internet use is never fully private and is monitored, e.g. adult supervision.	<p>To know that the internet is never fully private and can be monitored by others for our safety</p> <p>To know that passwords should be kept private to prevent anyone accessing your information / content and that only trusted adults should be able to share these e.g. school teachers knowing school account passwords, parents knowing passwords at home to keep you safe</p>
	I can describe how some online services may seek consent to store information about me; I know how to respond appropriately and who I can ask if I am not sure.	<p>To know that to give consent means to give permission</p> <p>To know that personal information can be used by others for their gain e.g. hackers, advertisers</p> <p>To know that we sometimes give devices permission to share personal information with others when we accept terms and conditions</p> <p>To know that these devices can collect our information</p> <p>To know to speak to a trusted adult if you're unsure about consenting to anything online</p>
	I know what the digital age of consent is and the impact this has on online services asking for consent.	<p>To know that the digital age of consent is 13</p> <p>To know that you must be at least 13 for a company to be able to ask to store your information, and if you are under this age, your parents / carers must consent for you</p>





# Computing



Year 5	LESSON 1		
	Composites & Components		Components
	EDUCATION FOR A CONNECTED WORLD OBJECTIVES  PRIVACY AND SECURITY To explain what a strong password is and demonstrate how to create one. To explain how many free apps or services may read and share private information (e.g. friends, contacts, likes, images, videos, voice, messages, geolocation) with others. To explain what app permissions are and can give some examples.	I can explain what a strong password is and demonstrate how to create one.	To know that some passwords are stronger than others To know what constitutes a good password e.g. mixture of words, symbols, numbers and upper and lower case To know that some passwords can be easily guessed To know that passwords should not contain personal information so that they cannot be guessed easily To know that passwords should be changed regularly
		I can explain how many free apps or services may read and share private information (e.g. friends, contacts, likes, images, videos, voice, messages, geolocation) with others.	To know that to give consent means to give permission To know that personal information can be used by others for their gain e.g. hackers, advertisers To know to speak to a trusted adult if you're unsure about consenting to anything online To know that we sometimes give devices permission to share personal information with others when we accept terms and conditions To know that these devices can collect our information To know that sometimes companies / apps can ask for permission for certain data that would enable them to profit from its use To know that a service provider may need access to certain things for the app to function properly e.g. access to the camera roll to upload photos To know that companies have a responsibility to use customers' data appropriately and they can get into trouble if they do not do so
I can explain what app permissions are and can give some examples.		To know that app permissions can give apps control of your devices for certain functions To know that we can give permission to apps for certain functions e.g. location, form filling personal info, contacts, camera, microphone, terms and conditions	
Year 5	LESSON 2		
	Composites & Components		Components
	EDUCATION FOR A CONNECTED WORLD OBJECTIVES  SELF-IMAGE AND IDENTITY To explain how identity online can be copied, modified or altered. To demonstrate how to make responsible choices about having an online identity, depending on context.	I can explain how identity online can be copied, modified or altered.	To know that modify means to change something, usually to improve it To know that altering is very similar to modifying, except it is usually a more permanent change, for example altering clothes, or altering the style of something To know that online identity can be copied, modified or altered for a number of reasons e.g. impersonation, bullying, parody, pranks, catfishing etc
		I can demonstrate how to make responsible choices about having an online identity, depending on context.	To know that you can modify and / or alter you own online presence if you feel it either isn't positive enough, or you feel you are oversharing information about yourself To know that someone might want to change their identity online for many reasons – some good, some bad e.g. safety / discretion, scamming etc. I can describe ways in which people might make themselves look different online e.g. avatars, fake pictures etc. To know that an avatar is useful to show people aspects of your personality, but not give away too much information about yourself To know that when posting online you must be aware that whatever you post could be taken and used by others To know that anything you post online can stay online and may have consequences at a later date To know that making responsible online choices will create a more positive online identity To know to consider the following when posting content online: What information am I sharing? How secure is it? Who am I sharing it with? What am I leaving for others to see / find?



# Computing



LESSON 3	
Composites & Components	
Components	
<div>Year 5</div> <div>EDUCATION FOR A CONNECTED WORLD OBJECTIVES</div> <div>ONLINE REPUTATION</div> <div>To search for information about an individual online and summarise the information found.</div> <div>To describe ways that information about anyone online can be used by others to make judgments about an individual and why these may be incorrect.</div> <div>MANAGING ONLINE INFORMATION</div> <div>To explain what is meant by 'being sceptical'; I can give examples of when and why it is important to be 'sceptical'.</div> <div>To evaluate digital content and can explain how to make choices about what is trustworthy e.g. differentiating between adverts and search results.</div> <div>To explain key concepts including information, reviews, fact, opinion, belief, validity, reliability and evidence.</div> <div>To identify ways the internet can draw us to information for different agendas, e.g. website notifications, pop-ups, targeted ads.</div> <div>To describe ways of identifying when online content has been commercially sponsored or boosted, (e.g. by commercial companies or by vloggers, content creators, influencers).</div> <div>To describe how fake news may affect someone's emotions and behaviour and explain why this may be harmful.</div> <div>I can explain what is meant by a 'hoax'. I can explain why someone would need to think carefully before they share.</div>	<div>I can search for information about an individual online and summarise the information found.</div> <div>I can describe ways that information about anyone online can be used by others to make judgments about an individual and why these may be incorrect.</div> <div>I can explain what is meant by 'being sceptical'; I can give examples of when and why it is important to be 'sceptical'.</div> <div>I can evaluate digital content and can explain how to make choices about what is trustworthy e.g. differentiating between adverts and search results.</div> <div>I can explain key concepts including information, reviews, fact, opinion, belief, validity, reliability and evidence.</div> <div>I can identify ways the internet can draw us to information for different agendas, e.g. website notifications, pop-ups, targeted ads.</div> <div>I can describe ways of identifying when online content has been commercially sponsored or boosted, (e.g. by commercial companies or by vloggers, content creators, influencers).</div> <div>I can describe how fake news may affect someone's emotions and behaviour and explain why this may be harmful.</div> <div>I can explain what is meant by a 'hoax'. I can explain why someone would need to think carefully before they share.</div>
	<div>To know that research is the process of finding facts / information in an organised manner</div> <div>To know that you can use the internet to research</div> <div>To know that a search engine can help us find things out online e.g. Google, Kiddle</div> <div>To know what a search engine is</div> <div>To know that you can search for information about yourself online</div> <div>To know that you can search for information about others online</div> <div>To know how to type keywords into a search engine</div> <div>To know how to navigate to and use a search engine or given websites and find information</div> <div>To know how to pick out key information from a text</div> <div>To know how to use functions such as home, forward, back buttons, links, tabs, and sections</div> <div>To know how to accurately use key words and phrases to find correct information</div> <div>To know that a summary is a brief statement or account of the main points of something</div> <div>To know how to summarise key points found in research</div> <div>To know that information about someone online might not always be true</div>
	<div>To know that being sceptical is an attitude of doubt as to whether something is true or not</div> <div>To know that there are many things online that are not true or have been put there to try to influence us</div> <div>To know that it is important to remain sceptical so that we are not influenced, or tricked into believing or doing something that won't benefit us online</div>
	<div>To know that facts are statements that we know to be true</div> <div>To know that opinions are your beliefs about something and might not be true for everyone</div> <div>To know that a belief is a firm thought that something is true</div> <div>To know that facts, opinions and beliefs are all on the internet and it is important to know the difference between the three</div> <div>To know that opinions, facts, and beliefs can be seen in many forms online e.g. webpages, blogs, videos, memes, posts, news stories etc.</div>
	<div>To know that influence is the act or power of producing an effect indirectly or without apparent use of force or exercise of command</div> <div>To know that companies can draw our attention to information by using things like notifications, pops-ups and targeted ads</div>
	<div>To know that the rise of the internet, commercialism and the use of advertising has become a huge influence on our lives, especially our online lives</div> <div>To know that there are many ways that content can be commercially sponsored or boosted e.g. paid partnerships, sponsored ads, boosting posts, targeted ads for certain audience, product placement</div> <div>To know some of the signs of these types of posts e.g. sponsored sign, Paid Partnership sign, etc</div>
	<div>To know that fake news is news or stories on the internet that are not true</div> <div>To know that fake news is often created to spread strong and often prejudiced opinions</div> <div>To know that fake news can often be taken as fact by people which may affect their emotions and behaviour</div>
	<div>To know that a hoax is to trick into believing or accepting as genuine something false and often preposterous</div> <div>To know that sharing hoax information can lead to a change in others' opinions and sometimes even their behaviour</div>



# Computing



Year 5		LESSON 4	
EDUCATION FOR A CONNECTED WORLD OBJECTIVES		Composites & Components	Components
<b>HEALTH, WELL-BEING AND LIFESTYLE</b> To describe ways technology can affect health and well-being both positively (e.g. mindfulness apps) and negatively. To describe some strategies, tips or advice to promote health and well-being with regards to technology. To recognise the benefits and risks of accessing information about health and well-being online and how we should balance this with talking to trusted adults and professionals. To explain how and why some apps and games may request or take payment for additional content (e.g. in-app purchases, loot boxes) and explain the importance of seeking permission from a trusted adult before purchasing.		I can describe ways technology can affect health and well-being both positively (e.g. mindfulness apps) and negatively.	To know that technology can be both a positive and negative distraction To know that technology can sometimes take all your concentration To know some examples of where it is easy to lose track of time when engaged with technology To know some examples of using technology positively and negatively To know that mindfulness means paying full attention to something. It means slowing down to really notice what you're doing. Being mindful is the opposite of rushing or multitasking. To know that meditation is a mental exercise that involves relaxation, focus, and awareness To know that mindfulness apps can be used to aid positive well-being
		I can describe some strategies, tips or advice to promote health and well-being with regards to technology.	To know that we can protect our health and well-being by accessing age-appropriate content, limiting screen time, speaking to trusted adults, being kind and accessing support
Year 5		LESSON 5	
EDUCATION FOR A CONNECTED WORLD OBJECTIVES		Composites & Components	Components
<b>COPYRIGHT AND OWNERSHIP</b> To assess and justify when it is acceptable to use the work of others. To give examples of content that is permitted to be reused and know how this content can be found online.		I can assess and justify when it is acceptable to use the work of others.	To know that reuse of digital content is when someone takes and uses part of, or a whole piece of digital content in their own work To know that it is not okay to copy someone's work / content and say it is your own To know that when searching online, most of the content we find belongs to someone else To know that copying someone else's work from the internet without permission can cause problems To know what those problems might be e.g. copyright infringement, upsetting others, taking someone's hard work, etc To know whether you can use someone's content e.g. Creative Commons
		I can give examples of content that is permitted to be reused and know how this content can be found online.	To know that there are different types of content / images available on the internet which may have different copyright licenses i.e. some are free to use; some have copyright licences available to purchase so you can use them; some are free to use for certain things like education or news reporting, but it is important to check; some you are unable to copy at all To know how to find out about these licenses (Google Image search tools) To know some examples of content you cannot reuse without permission To know that some content can be reused e.g. computer game sharing / streaming To know that, for some companies, the exposure of their games / content online is seen as a positive and as a form of advertisement To know that sometimes it is okay to share the content created by others, but you have to make sure you do your research first and follow the rules To know that often, for the purposes of education, content is permitted to be reused, but it is important to check



# Computing



LESSON 6	
Composites & Components	Components
<p><b>Year 5</b></p> <p><b>EDUCATION FOR A CONNECTED WORLD OBJECTIVES</b></p> <p><b>ONLINE RELATIONSHIPS</b></p> <p>To give examples of technology-specific forms of communication (e.g. emojis, memes and GIFs). To explain 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. To describe some of the ways people may be involved in online communities and describe how they might collaborate constructively with others and make positive contributions. (e.g. gaming communities or social media groups). To explain how someone can get help if they are having problems and identify when to tell a trusted adult. To demonstrate how to support others (including those who are having difficulties) online.</p> <p><b>ONLINE BULLYING</b></p> <p>To recognise online bullying can be different to bullying in the physical world and can describe some of those differences. To describe how what one person perceives as playful joking and teasing (including 'banter') might be experienced by others as bullying. To explain how anyone can get help if they are being bullied online and identify when to tell a trusted adult. To identify a range of ways to report concerns and access support both in school and at home about online bullying. To explain how to block abusive users. To describe the helpline services which can help people experiencing bullying, and how to access them (e.g. Childline or The Mix).</p>	<p>I can give examples of technology-specific forms of communication (e.g. emojis, memes and GIFs).</p> <p>I can explain 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.</p> <p>I can explain how someone can get help if they are having problems and identify when to tell a trusted adult.</p> <p>I can describe some of the ways people may be involved in online communities and describe how they might collaborate constructively with others and make positive contributions. (e.g. gaming communities or social media groups).</p> <p>I can explain how anyone can get help if they are being bullied online and identify when to tell a trusted adult.</p> <p>I can identify a range of ways to report concerns and access support both in school and at home about online bullying.</p> <p>I can demonstrate how to support others (including those who are having difficulties) online.</p> <p>I can describe the helpline services which can help people experiencing bullying, and how to access them (e.g. Childline or The Mix).</p> <p>I can recognise online bullying can be different to bullying in the physical world and can describe some of those differences.</p> <p>I can describe how what one person perceives as playful joking and teasing (including 'banter') might be experienced by others as bullying.</p>
	<p>To know that communicate means to exchange thoughts, ideas, or information To know that we can communicate with people online and offline To know that we can communicate in a variety of different ways e.g. verbally, text, video, body language, etc To know that there are technology specific forms of communication (e.g. emoji, memes, GIFs) To know that an emoji is a small digital image or icon used to express an idea or emotion To know that a meme is an image, video, piece of text, etc., typically humorous in nature, that is copied and spread rapidly by internet users, often with slight variations To know that a GIF is a computer file that is used on the internet for sending images, especially moving images</p>
	<p>To know that knowing someone offline is different than knowing someone online To know why it is different e.g. not face to face, might not be sharing true identity etc To know that it is better to communicate with people you know in the real world when online To know that you should always gain permission from a trusted adult if you would like to communicate with someone you do not know in the real world To know that people communicating online might not be being honest and truthful e.g. they might be looking to gain access to personal information To know that people you communicate with online might want to harm you / others and to know that this not your fault To know that you should seek the support of trusted adults if something is making you uncomfortable online</p>
	<p>To know that the internet can be used to collaborate with others To know that you can communicate and collaborate with others online in a variety of ways e.g. email, gaming chat, social media groups, etc To know that through online collaboration people can make positive contributions e.g. social media groups, fundraising, raising awareness of certain issues, etc</p>
	<p>To know different examples of things that might make you feel sad, worried, uncomfortable, or frightened online e.g. unkind / inappropriate comments, age-inappropriate content To know that it is okay to change your mind about trusting someone if you feel nervous, uncomfortable or worried To know how to deal with situations that make you feel uncomfortable online e.g. speaking to a trusted adult To know how to ask for help To know whom to speak to when you need help / support e.g. trusted adults To know that, as well as speaking to trusted adults, you can get help online or on the telephone from organisations, such as Childline To know how to offer support to others if they are having difficulties online</p>
	<p>To know where bullying can happen online e.g. online gaming chat, WhatsApp, social media, etc. To understand how bullying can make someone feel e.g. scared, lonely, upset, anxious, hated To know some of the signs that someone might be being bullied e.g. become withdrawn, quiet, sad To know that someone experiencing bullying is not to blame and they must not feel that way To know how someone can / would get help about being bullied online or offline To know that you should always try your best to help someone if you feel they are being bullied To know that it is the right thing to do to report bullying to a trusted adult To know that if you are upset or worried about something online, you should talk to a trusted adult To know that children do not have to fix problems on their own To know that online bullying is bullying that happens on digital devices To know how online bullying is different to bullying in the physical world and be able to describe some of those differences</p>
	<p>To know that not everyone thinks the same as them To know that people have different thoughts, feelings and beliefs and we must respect these To know that people have different likes and dislikes To know that we must be aware that content shared online might be seen in a different light by others e.g. something they find funny might not be taken in the same way by someone else To know that playful joking and teasing might be taken as bullying by another</p>



# Computing



		I can explain how to block abusive users.	To know that blocking an individual will keep them from being able to see your posts or interact with you To know that you can block people if you are having issues with them To know that on most apps / services there will be somewhere you can click to block someone should you need to
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# Computing



Year 6	LESSON 1	
	Composites & Components	Components
<p><b>EDUCATION FOR A CONNECTED WORLD OBJECTIVES</b></p> <p><b>ONLINE REPUTATION</b> To explain the ways in which anyone can develop a positive online reputation. To explain strategies anyone can use to protect their 'digital personality' and online reputation, including degrees of anonymity;</p> <p><b>MANAGING ONLINE INFORMATION</b> To explain how search engines work and how results are selected and ranked. To explain how to use search technologies effectively. To describe how some online information can be opinion and can offer examples. To explain how and why some people may present 'opinions' as 'facts'; why the popularity of an opinion or the personalities of those promoting it does not necessarily make it true, fair or perhaps even legal. To demonstrate how to analyse and evaluate the validity of 'facts' and information and I can explain why using these strategies are important. To identify, flag and report inappropriate content.</p>	I can explain the ways in which anyone can develop a positive online reputation.	<p>To know that reputation means people's opinions of you</p> <p>To know that once something is posted online it is difficult to remove</p> <p>To know that it is important to be honest both online and offline</p> <p>To know that people will perceive you differently depending on how you behave towards them</p> <p>To know how to make good choices when interacting with others both online and offline</p> <p>To know that to develop a positive online reputation, you need to behave positively online</p> <p>To know that reacting badly to mean comments or posts you disagree with can affect your online reputation</p> <p>To know that you develop a positive online reputation by treating people positively</p> <p>To know that anything done with emotion can be rash, and you must step back and take your time before making any decisions about what to post online</p>
	I can explain strategies anyone can use to protect their 'digital personality' and online reputation, including degrees of anonymity.	<p>To know that anonymity means "namelessness" and comes from Greek words meaning "without name" and means when a person's identity or name is unknown</p> <p>To know that when a person is called anonymous, nobody knows who he or she is, or the anonymous person does not want to be found out</p>
	<p>I can explain how to use search technologies effectively.</p> <p>I can explain how search engines work and how results are selected and ranked.</p>	<p>To know how to navigate to and use a search engine or given websites and find information</p> <p>To know that you can search for information about yourself online</p> <p>To know that you can search for information about others online</p> <p>To know how to explain to others how to search online safely</p> <p>To know that search engines use algorithms to order the list of webpages they return</p> <p>To know that the webpages that are placed at the top of the list are usually the most useful to you</p>
	<p>I can describe how some online information can be opinion and can offer examples.</p> <p>I can explain how and why some people may present 'opinions' as 'facts'; why the popularity of an opinion or the personalities of those promoting it does not necessarily make it true, fair or perhaps even legal.</p> <p>I can identify, flag and report inappropriate content.</p>	<p>To know that facts are statements that we know to be true</p> <p>To know that opinions are your beliefs about something and might not be true for everyone</p> <p>To know that a belief is a firm thought that something is true</p> <p>To know that facts, opinions and beliefs are all on the internet and it is important to know the difference between the three</p> <p>To know that opinions, facts, and beliefs can be seen in many forms online e.g. webpages, blogs, videos, memes, posts, news stories etc.</p> <p>To know that things you find online might not be true</p> <p>To know that not everyone has to agree with your opinion and vice versa</p> <p>To know that some people might disagree over opinions</p> <p>To know that just because lots of people are saying a certain thing, it doesn't necessarily mean it's true</p> <p>To know that fake accounts are created online for different purposes e.g. these could be phishing scams, spreading misinformation and disinformation, advertisements, accessing personal information, etc</p> <p>To know that flagging is now a common mechanism for reporting offensive content to an online platform, and is used widely across most popular social media sites</p> <p>To know that you can flag and report inappropriate or untrustworthy content</p>
	I can explain strategies anyone can use to protect their 'digital personality' and online reputation, including degrees of anonymity.	<p>To know that anonymity means "namelessness" and comes from Greek words meaning "without name" and is when a person's identity or name is unknown</p> <p>To know that when a person is called anonymous, nobody knows who he or she is, or the anonymous person does not want to be found out</p>



# Computing



## LESSON 2

### Composites & Components

### Components

I can explain how sharing something online may have an impact either positively or negatively.

To know that a post is a message, such as text or photos, published online by a user while referring to a message board, comment section, or social network  
To know that you can post a variety of content online  
To know that what you post online will be seen by others  
To know that people may make judgements about you by what you post online  
To know that we must think of others before posting / saying anything online  
To know that once something is posted online it is difficult to remove  
To know that whatever you post / share online could be taken in a different context

I can demonstrate how to make responsible choices about having an online identity, depending on context.

To know that you can modify and / or alter your own online presence if you feel it either isn't positive enough, or you feel you are oversharing information about yourself  
To know that someone might want to change their identity online for many reasons – some good, some bad e.g. safety / discretion, scamming etc.  
I can describe ways in which people might make themselves look different online e.g. avatars, fake pictures etc.  
To know that an avatar is useful to show people aspects of your personality, but not give away too much information about yourself  
To know that when posting online you must be aware that whatever you post could be taken and used by others  
To know that anything you post online can stay online and may have consequences at a later date  
To know that making responsible online choices will create a more positive online identity  
To know to consider the following when posting content online: What information am I sharing? How secure is it? Who am I sharing it with? What am I leaving for others to see / find?

I can describe how to be kind and show respect for others online including the importance of respecting boundaries regarding what is shared about them online and how to support them if others do not.

To know that social boundaries are established social rules that are considered typical because most people in society agree that they are reasonable ways to live  
To know that people will have their own personal boundaries and it is important that we respect them  
To know that these boundaries, although they may be similar to ours, make everyone different  
To know that it is important to find out whether people are okay with what you would like to post online before posting e.g. a picture of a friend or a silly video might be funny to you, but embarrassing for a friend  
To know that not everyone thinks the same as them  
To know that people have different thoughts, feelings and beliefs and we must respect these

I can describe how to be kind and show respect for others online including the importance of respecting boundaries regarding what is shared about them online and how to support them if others do not. (cont.)

To know that people have different likes and dislikes  
To know that we must be aware that content shared online might be seen in a different light by others e.g. something they find funny might not be taken in the same way by someone else  
To know that it is okay to change your mind about trusting someone if you feel nervous, uncomfortable or worried  
To know how to deal with situations that make you feel uncomfortable online e.g. speaking to a trusted adult  
To know that children do not have to fix problems on their own  
To know that you must gain consent before you post something with someone else on e.g. a photo / video  
To know that, even if you think something is okay to post now, it might have a negative impact in the future  
To know that taking and sharing inappropriate images is not okay  
To know that even if you post something in a private group, it may not stay private and could have consequences e.g. screen-grabs  
To know and make responsible choices with regards to sharing / posting by looking at different scenarios

I can explain that taking or sharing inappropriate images of someone (e.g. embarrassing images), even if they say it is okay, may have an impact for the sharer and others; and who can help if someone is worried about this.

I can describe how things shared privately online can have unintended consequences for others. e.g. screen-grabs.

I can describe how to capture bullying content as evidence (e.g. screen-grab, URL, profile) to share with others who can help me. I can explain how someone would report online bullying in different contexts.

To know where bullying can happen online e.g. online gaming chat, WhatsApp, social media, etc.  
To understand how bullying can make someone feel e.g. scared, lonely, upset, anxious, hated  
To know some of the signs that someone might be being bullied e.g. become withdrawn, quiet, sad  
To know that someone experiencing bullying is not to blame and they must not feel that way  
To know how someone can / would get help about being bullied online or offline  
To know that you should always try your best to help someone if you feel they are being bullied  
To know that it is the right thing to do to report bullying to a trusted adult  
To know that if you are upset or worried about something online you should talk to a trusted adult  
To know and name different people who you could ask for help and support  
To know that children do not have to fix problems on their own  
To know how to take a screen-grab / screenshot on a variety of devices  
To know how to report online bullying in different scenarios

Year 6

### EDUCATION FOR A CONNECTED WORLD OBJECTIVES

#### ONLINE RELATIONSHIPS

To explain how sharing something online may have an impact either positively or negatively.  
To describe how to be kind and show respect for others online including the importance of respecting boundaries regarding what is shared about them online and how to support them if others do not.

To describe how things shared privately online can have unintended consequences for others. e.g. screen-grabs.  
To explain that taking or sharing inappropriate images of someone (e.g. embarrassing images), even if they say it is okay, may have an impact for the sharer and others; and who can help if someone is worried about this.

#### ONLINE BULLYING

To describe how to capture bullying content as evidence (e.g. screen-grab, URL, profile) to share with others who can help me.  
To explain how someone would report online bullying in different contexts.



# Computing



Year 6	LESSON 3		
	Composites & Components		Components
	EDUCATION FOR A CONNECTED WORLD OBJECTIVES	SELF-IMAGE AND IDENTITY	
	<p>To identify and critically evaluate online content relating to gender, race, religion, disability, culture and other groups, and explain why it is important to challenge and reject inappropriate representations online.</p> <p>To describe issues online that could make anyone feel sad, worried, uncomfortable, or frightened. I know and can give examples of how to get help, both on and offline.</p> <p>To explain the importance of asking until I get the help needed.</p>	<p>I can identify and critically evaluate online content relating to gender, race, religion, disability, culture and other groups, and explain why it is important to challenge and reject inappropriate representations online.</p> <p>I can describe issues online that could make anyone feel sad, worried, uncomfortable, or frightened. I know and can give examples of how to get help, both on and offline.</p> <p>I can explain the importance of asking until I get the help needed.</p>	<p>To know that a stereotype is defined as, "An assumption about what someone will do or how they will behave based on what social groups they belong to, such as race."</p> <p>To know that there is a lot of stereotyping with regards to gender, race, religion, disability, culture and other groups, and that it is important to challenge these</p> <p>To know that it is okay to disagree with stereotypes and inappropriate representations online but that this should be done respectfully</p> <p>To know that there are many people trying to break stereotypes</p> <p>To know different examples of things that might make you feel sad, worried, uncomfortable, or frightened online e.g. unkind / inappropriate comments, age-inappropriate content</p> <p>To know that you can ask for help</p> <p>To know whom to speak to when you need help / support e.g. trusted adults</p> <p>To know that you must continue to ask for help until you get it</p> <p>To know that it is okay to change your mind about trusting someone if you feel nervous, uncomfortable or worried</p> <p>To know how to deal with situations that make you feel uncomfortable online e.g. speaking to a trusted adult</p> <p>To know that you can be hurt or upset by things said to you online</p> <p>To know what to do if you have been hurt or upset by something online e.g. speaking to a trusted adult</p> <p>To know that if we comment in a digital space, we should always try to be respectful as we would offline</p>



# Computing



## LESSON 4

Year 6	LESSON 4		
	Composites & Components		Components
	<p>EDUCATION FOR A CONNECTED WORLD OBJECTIVES</p> <p>HEALTH, WELL-BEING AND LIFESTYLE</p> <p>To describe common systems that regulate age-related content (e.g. PEGI, BBFC, parental warnings) and describe their purpose.</p> <p>To recognise and can discuss the pressures that technology can place on someone and how / when they could manage this.</p> <p>To recognise features of persuasive design and how they are used to keep users engaged (current and future use).</p> <p>To assess and action different strategies to limit the impact of technology on health (e.g. night-shift mode, regular breaks, correct posture, sleep, diet and exercise).</p> <p>MANAGING ONLINE INFORMATION</p> <p>To explain how search engines work and how results are selected and ranked.</p> <p>To explain how to use search technologies effectively.</p> <p>To describe how some online information can be opinion and can offer examples.</p> <p>To explain how and why some people may present 'opinions' as 'facts'; why the popularity of an opinion or the personalities of those promoting it does not necessarily make it true, fair or perhaps even legal.</p> <p>To define the terms 'influence', 'manipulation' and 'persuasion' and explain how someone might encounter these online (e.g. advertising and 'ad targeting' and targeting for fake news).</p> <p>To understand the concept of persuasive design and how it can be used to influence peoples' choices.</p> <p>To demonstrate how to analyse and evaluate the validity of 'facts' and information and I can explain why using these strategies are important.</p> <p>To explain how companies and news providers target people with online news stories they are more likely to engage with and how to recognise this.</p> <p>To describe the difference between online misinformation and dis-information.</p> <p>To explain why information that is on a large number of sites may still be inaccurate or untrue.</p> <p>To assess how this might happen (e.g. the sharing of misinformation or disinformation).</p>		
<p>I can describe common systems that regulate age-related content (e.g. PEGI, BBFC, parental warnings) and describe their purpose.</p> <p>I recognise and can discuss the pressures that technology can place on someone and how / when they could manage this.</p> <p>I understand the concept of persuasive design and how it can be used to influences peoples' choices.</p> <p>I can recognise features of persuasive design and how they are used to keep users engaged (current and future use).</p> <p>I can assess and action different strategies to limit the impact of technology on health (e.g. night-shift mode, regular breaks, correct posture, sleep, diet and exercise).</p> <p>I can explain how to use search technologies effectively.</p> <p>I can explain how search engines work and how results are selected and ranked.</p> <p>I can describe how some online information can be opinion and can offer examples.</p> <p>I can explain how and why some people may present 'opinions' as 'facts'; why the popularity of an opinion or the personalities of those promoting it does not necessarily make it true, fair or perhaps even legal.</p> <p>I can define the terms 'influence', 'manipulation' and 'persuasion' and explain how someone might encounter these online (e.g. advertising and 'ad targeting' and targeting for fake news).</p>		<p>To know what PEGI and BBFC stand for</p> <p>To know that these organisations and associated parental warnings exist to ensure that children to not access or see content that isn't age-appropriate</p> <p>To know that peer pressure means feeling like you must do something because people around you want you to or expect you to</p> <p>To know that people can experience pressure surrounding technology with regards to technology</p> <p>To know that there can be pressure from peers / others to use technology</p> <p>To know where to go for advice should you feel pressured e.g. trusted adults</p> <p>To know that it is okay to ask for advice when you're feeling pressured</p> <p>To know that persuasive design can be defined as, "an area of design practice that focuses on influencing human behaviour through a product's or service's characteristics."</p> <p>To know that persuasive design uses the psychology of rewards and punishments to manipulate us, as humans, into not putting our technology down</p> <p>To know that the more we use technology, the more money the companies make</p> <p>To know that this is the reason that technology is so addictive to us and why we often find it difficult to put it away</p> <p>To know different examples of persuasive design e.g. notifications, streaks, auto-play, endless feeds</p> <p>To know that the blue light emitted from devices makes it difficult for us to switch off and go to sleep</p> <p>To know that developers create features to help us protect our health and well-being e.g. night-shift (night mode, dark mode), screen time calculators, time limits, age ratings, etc.</p> <p>To know that we can protect our health and well-being by accessing age-appropriate content, limiting screen time, speaking to trusted adults, being kind and accessing support</p> <p>To know that we must take regular breaks from technology</p> <p>To be aware of posture while using technology</p> <p>To know that there are alternatives to using technology e.g. playing sport, reading books</p> <p>To know how to explain to others how to search online safely</p> <p>To know that search engines use algorithms to order the list of webpages they return</p> <p>To know that the webpages that are placed at the top of the list are usually the most useful to you</p> <p>To know that facts are statements that we know to be true</p> <p>To know that opinions are your beliefs about something and might not be true for everyone</p> <p>To know that a belief is a firm thought that something is true</p> <p>To know that facts, opinions and beliefs are all on the internet and it is important to know the difference between the three</p> <p>To know that opinions, facts, and beliefs can be seen in many forms online e.g. webpages, blogs, videos, memes, posts, news stories etc</p> <p>To know that things you find online might not be true</p> <p>To be able to give examples of where you may find opinions online e.g. social media</p> <p>To know that just because lots of people are saying a certain thing, it doesn't necessarily mean it's true</p> <p>To know that just because someone is popular or has a large following, it does not necessarily mean what they are saying is factual, fair or perhaps even legal</p> <p>To know that influence is the power to have an effect on people or things</p> <p>To know that manipulation is the act of controlling someone or something to your own advantage</p> <p>To know that persuasion is the act of making someone do or believe something by giving them a good reason to do it or by talking to that person and making them believe it</p> <p>To know that you may encounter these things online (e.g. persuasive design, advertising and 'ad targeting' and targeting for fake news)</p>	



# Computing



		I can demonstrate how to analyse and evaluate the validity of 'facts' and information and I can explain why using these strategies are important.	To know how to analyse the validity of an online source (Knowledge CHASERS) To know that it important to form your own opinions and not just accept what you see to be true
		I can explain how companies and news providers target people with online news stories they are more likely to engage with and how to recognise this.  I can explain why information that is on a large number of sites may still be inaccurate or untrue. I can assess how this might happen (e.g. the sharing of misinformation or disinformation).  I can describe the difference between online misinformation and dis-information.	To know the difference between misinformation and disinformation To know that misinformation is false or misleading information that is unwittingly shared To know that disinformation is deliberately created and distributed with an intent to deceive or harm To know that anyone can create content online and that some of it is deliberately misleading / untrue To know that you should evaluate all sources of information and question the validity before making judgements and forming beliefs
		I can identify, flag and report inappropriate content.	To know that flagging is now a common mechanism for reporting offensive content to an online. platform, and is used widely across most popular social media sites To know that you can flag and report inappropriate or untrustworthy content





# Computing



## LESSON 5 & 6

Year 6	LESSON 5 & 6		
	Composites & Components	Components	
	<p>EDUCATION FOR A CONNECTED WORLD OBJECTIVES</p> <p><b>PRIVACY AND SECURITY</b></p> <p>To describe effective ways people can manage passwords (e.g. storing them securely or saving them in the browser).</p> <p>To explain what to do if a password is shared, lost or stolen.</p> <p>To describe how and why people should keep their software and apps up to date, e.g. auto updates.</p> <p>To describe simple ways to increase privacy on apps and services that provide privacy settings.</p> <p>To describe ways in which some online content targets people to gain money or information illegally; I can describe strategies to help me identify such content (e.g. scams, phishing).</p> <p>To know that online services have terms and conditions that govern their use.</p> <p><b>COPYRIGHT AND OWNERSHIP</b></p> <p>I can demonstrate the use of search tools to find and access online content which can be reused by others.</p> <p>I can demonstrate how to make references to and acknowledge sources I have used from the internet.</p>	<p>I can describe effective ways people can manage passwords (e.g. storing them securely or saving them in the browser).</p> <p>I can explain what to do if a password is shared, lost or stolen.</p>	<p>To know what constitutes a good password e.g. mixture of words, symbols, numbers and upper and lower case</p> <p>To know that some passwords can be easily guessed</p> <p>To know that passwords should not contain personal information so that they cannot be guessed easily</p> <p>To know that passwords should be changed regularly</p> <p>To know that there are secure effective ways to manage passwords e.g. saving them securely in a browser / keychain</p> <p>To know that you can reset your password if it is shared, lost or stolen</p> <p>To know how to reset your password</p>
		<p>I can describe how and why people should keep their software and apps up to date, e.g. auto updates.</p>	<p>To know that software and apps are continually developed by developers which means that we need to update them</p> <p>To know that it is important to update apps and software for functionality and security reasons</p> <p>To know how to update an app</p> <p>To know that an auto update will either update or prompt you to update your computer, software or apps without you having to search for the latest releases</p>
		<p>I can describe simple ways to increase privacy on apps and services that provide privacy settings.</p> <p>I can describe ways in which some online content targets people to gain money or information illegally; I can describe strategies to help me identify such content (e.g. scams, phishing).</p>	<p>To know that there are ways to increase privacy on many of the apps and services we use e.g. keychain for passwords, antivirus software, privacy settings (on social media etc), private browsing, passcodes, installing only trusted software, only enabling certain cookies, encrypted messaging etc</p> <p>To be able to give examples of some of these</p> <p>To know that scams and phishing are becoming much more common and increasingly sophisticated</p> <p>To know that it is important for the user to be aware of these kinds of scams and be on the lookout for them</p>
		<p>I know that online services have terms and conditions that govern their use.</p>	<p>To know that online services have terms and conditions that we must agree to before use</p> <p>To know that online services must also abide by terms and conditions to keep users safe and secure</p>
<p>I can demonstrate the use of search tools to find and access online content which can be reused by others.</p> <p>I can demonstrate how to make references to and acknowledge sources I have used from the internet.</p>		<p>To know that reuse of digital content is when someone takes and uses part of or a whole piece of digital content in their own work</p> <p>To know that it is not okay to copy someone's work / content and say it is your own</p> <p>To know that when searching online, most of the content we find belongs to someone else</p> <p>To know that copying someone else's work from the internet without permission can cause problems</p> <p>To know what those problems might be e.g. copyright infringement, upset, taking someone's hard work, etc.</p> <p>To know whether you can use someone's content e.g. creative commons</p> <p>To know that there are different types of content / images available on the internet which may have different copyright licenses i.e. some are free to use; some have copyright licences available to purchase so you can use them; some are free to use for certain things like education or news reporting, but it is important to check; some you are unable to copy at all</p> <p>To know how to find out about these licenses (Google Image search tools)</p> <p>To know some examples of content you cannot reuse without permission</p> <p>To know that sometimes it is okay to share the content created by others, but you must make sure you do your research first and follow the rules</p> <p>To know that often, for the purposes of education, content is permitted to be reused, but it is important to check</p> <p>To know that we must use references and quotations when using someone else's words / ideas within our own work</p> <p>To know the basics of how to reference correctly</p>	

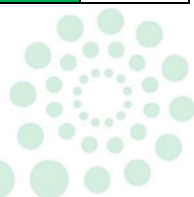


# Computing



## Computing /ICT Skills

	Year 3								Year 4								seasons around the world
	That's All Folks	Lindow Man	Rocky the Findosaur	Athens V Sparta	Under the Canopy	Three Giant Steps	Saxon King	Come Fly With Me	Lightening Speed	Out and About	May The Force Be With You	Law and Order	Picture our Planet	Window on the World	Viking Warrior	Cry Freedom	
<b>Digital Citizenship</b>																	
DC5 Use ICT to exchange ideas and collaborate with others remotely																	
DC6 Use ICT safely and appreciate the need to keep electronic data secure																	
<b>Computer Science</b>																	
CS4 Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems																	
CS5 Solve problems by decomposing them into smaller parts																	
CS6 Use sequence, selection, and repetition in programs																	
CS7 Work with variables and various forms of input and output																	
CS8 Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs																	
<b>Data</b>																	
D3 Identify how ICT can be used to collect and structure information so that it can be searched and analysed																	
D4 Capture, record and analyse data using sensors in order to support observations and investigations																	
<b>Information Technology</b>																	
IT5 Identify the opportunities computer networks offer for communication and collaboration																	
IT6 Use key words to search for and select appropriate information from the internet and other digital sources																	
IT7 Understand computer networks including the Internet, recognizing how they can provide multiple services, such as the world-wide web																	
<b>Multimedia</b>																	
Mm6 Explore alternative approaches to develop and refine work																	
Mm7 Use a variety of ICT tools to create, refine and present work in a variety of ways																	
Mm8 Use features of layout, presentation and organisation in print and on screen																	
Mm9 Use editing skills for visual effects																	





# Computing



## Computing /ICT Skills

Computing /ICT Skills

	Year 5								Year 6							
	Mission Control	The Rescuers	Go with the Flow	You're not Invited	Full of Beans	Been around the world	British Bulldog	Come Fly With Me	A World of Bright Ideas	True Crime?	Time Team	Wars of the World	Global Warning	In Your Element	Pharaoh Queen	I Have a Dream...
Digital Citizenship																
DC9 Use ICT safely, respectfully and responsibly, managing risk and showing awareness of other users																
Computer Science																
CS4 Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems																
CS5 Solve problems by decomposing them into smaller parts																
CS6 Use sequence, selection, and repetition in programs																
CS7 Work with variables and various forms of input and output																
CS8 Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs																
Data																
D5 Use ICT to explore and develop simple models by changing variables and simple formulae																
D6 Answer questions by using ICT to identify, collect, store, analyse and present information																
D7 Represent data from analysis in appropriate ways, including the use of graphs																
Information Technology																
IT7 Understand computer networks including the Internet, recognizing how they can provide multiple services, such as the world-wide web																
IT8 Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content																
Multimedia																
Mm10 Analyse, describe and discuss the effectiveness of the work with ICT																
Mm11 Use a variety of ICT tools to create, develop and refine presentations and performances, integrating effect to enhance outcomes																
Mm12 Select, use and combine a variety of software (including internet services) on a range of digital devices to accomplish given goals, including collecting, analysing, evaluating and presenting data and information																
Mm13 Organise and adjust communication according to the needs of the audience and the technology, including taking account of the quality and content of the communication																
Mm14 Use a variety of ICT tools to create, refine and present work in a variety of digital and printed formats using appropriate forms and conventions.																



# Computing

