Mr Andrews Online

Computing progression at Oakdene Primary School

Strand	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
	• Create posters by adding images to frames, editing text by changing font style, colour and size. • Create images with different layers by placing one image on top of another. • Combine words and images to create word art. • Create a visual plan using images and text to tell a story. • Create a simple presentation using slides. • Combine images, text and voice recordings to retell a story. • Combine images and edit text to create front covers, posters and invitations. • Explore augmented reality and capture images. • Use digital drawing tools to draw characters from a story or for a game. • Type words correctly using a keyboard. • Create a simple animation with moving characters and voice recordings.	• Create digital books combining text, images, and sounds. • Type words in a speech bubble using a keyboard. • Combine text and images to create a video presentation. • Type words correctly using a keyboard. • Edit video content to improve it. • Collect images by capturing screenshots and editing them. • Combine images to create digital galleries. • Present information on a topic using images, text boxes and voice recordings. • Create an animation with moving characters and voice recordings.	• Combine text (fonts, colours, backgrounds, speech bubbles), images, voice recordings and videos to create a digital book. • Edit digital content to improve it according to feedback. • Create and edit a video/animation by combining text, images and music. • Combine words and images to create word art. • Design and create digital logos and graphics combining fonts and texts. • Create a contents page, a blurb and add page numbers. • Combine images and text for different effects. • Create a presentation with slides that include animations and transition effects. • Use a camera accurately to capture interesting perspectives. • Apply edits to digital content to achieve a	•Understand why it's important to know your audience when designing games. •Remove the background from images. •Use photo editing tools to improve the quality of images. •Create digital books/posters by combining: text, images, voice recordings, and videos •Create and edit a video by combining text, images and music. •Use a keyboard accurately with two hands to type and format documents. •Used digital drawing tool to create prototype designs. •Combine text (fonts, colours, backgrounds), images, voice recordings and videos to create a digital book. •Create a presentation with slides with animations and transition effects. •Create graphics with texts and images.	• Identify the pros and cons of different games. • Organise digital content by combine text boxes and images. • Make changes to digital content to animate characters in the game. • Use creative tools to create a marketing campaign for a game. • Design and create a series of 8 bit characters. • Combine text and images to create digital posters. • Plan and create a video by combining images, text, music and different layouts. • Use word processing tools to format a document. • Work independently to create a presentation that includes graphics, images and movies. • Make a presentation to an audience using digital tools. • Design and build a webpage and share it online. • Plan a multi-scene animation including	•Present understanding of new programming concepts with digital tools. •Plan a digital resource to teach a specific audience something new. •Make choices on the best digital software available to present my ideas. •Edit videos, graphics and documents independently to create a digital book or an app/website. •Work independently to combine a range of tools (text, video, graphics, images) to present my ideas clearly for an audience to follow. •Use editing tools to label digital images. •Evaluate my own content against a success criteria and make improvements accordingly. •Format a digital document to present ideas. •Design a suitable brand for a business and promote it. •Create a spreadsheet with formulas for profit and loss of a business

	• Use a camera to capture images which are in focus. • Select options to change the appearance of digital content. • Apply edits to digital content to achieve a particular effect. • Create digital galleries using images and text. • Use photo editing tools to crop images. • Create digital books combining: text, images, and sounds. • Collect images by capturing screenshots and editing them. • Make improvements to digital content following feedback.		particular effect and save them as both images and videos. • Create galleries that include images and video effects. • Plan a movie with scripts that has a beginning, middle and end and combines text, music, and images. • Select options to change the appearance of digital content and explore tools to edit it. • Plan a simple animation using a storyboard. • Take a series of pictures and combine them to form an animation. • Add text, graphics and sound effects to improve an animation using editing tools. • Create an animation with moving characters/objects keeping the camera steady using 'onion skinning'. • Combine animated characters and voice recordings for particular effects. • Explore augmented reality and capture images and videos. • Explore green screen technology and capture and edit videos.	•Use the camera accurately to create a short clip for editing. •Edit digital content to improve it, according to feedback. •Organise a movie with scripts adding titles, images and effects. •Build a website, web app or webpage that includes pages, text, images and videos in a clear and organised way. •Create an app/website with menus for ease of navigation. •Edit digital content to improve it according to feedback.	characters, scenes, camera angles and effects. • Edit a stop-go animation to improve the quality of the animation using 'onion skinning' features. • Create title and credits screens by combining colours and text. • Edit/refine a movie to add special effects, text, sound effects, graphics and backing track. • Evaluate my own content against success criteria and make improvements accordingly.	•Work independently to create a presentation that includes graphics, images and movies. •Design and build a webpage and share it online. •Combine text and images to create eye catching social media adverts. •Create a video for a marketing campaign and make improvements following feedback. •Make a presentation to an audience using digital tools.
Computer Science	• Create simple programs. • Design and create programs for others to play. • Describe uses of technology beyond school. • Predict the outcomes of a program. • Create simple programs.	• Create simple programs. • Debug an error in a simple algorithm. • Understand that instructions in an algorithm need to be precise and unambiguous. • Use logical reasoning to predict the behaviour of simple programs.	• Identify the uses of technology beyond school and discuss reasons why they are helpful (e.g. robots and simulations). • Understand how a computer stores data. • Understand the main hardware components of a computer system.	• Design and create a prototype game and make improvements following feedback. • Review a game and make improvements by debugging. • Create a program using a range of events/inputs to control what happens.	• Work independently to design and program a game for a specific audience. • Program a game which tells a story over more than one level. • Experiment with different codes to test each element of a game until a	•Write programs that accomplish specific goals. •Use selections and procedures in programs to draw shapes, patterns and pictures. •Create programs including repeat commands.

		• Use simple repeats in programs. • Use basic selections in programs and explain using the language if … then. • Understand basic programming techniques. • Identify, name and explain the functions of the main components of a computer. • Investigate how computers have changed over the years. • Name and compare common input and output devices of computer systems. • Identify and describe uses of technology beyond school. • Explain how robots can be controlled.	• Understand various forms of input/output. • Understand how the internet works, including how it is structured and that data travels along. • Identify the uses of technology beyond school and discuss reasons why they are helpful (e.g. robots and simulations). • Understand how a computer stores data.	• Work with various forms of input/output. • Write programs that accomplish specific goals. • Use selection in algorithms and programs, i.e. if… then… • Use logical reasoning to write simple algorithms explaining the sequence commands should run in. • Solve problems by decomposing into smaller parts. • Debug programs so they run correctly. • Create programs including repeat commands. • Create different graphs and tables and interpret them. • Create an interactive quiz and program right and wrong answers. • Embed an interactive quiz into a website.	desired outcome is reached. • Make predictions on what will happen in a program when inputs are changed. • Test, debug and improve programs. • Describe the impact of technology on society. • Understand about e-commerce - what it is and its impact. • Investigate the services offered by the internet. • Understand about different types of robotics and how they can impact our lives. • Understand about the advancements in technology and the impact this has had on society. • Work independently on a topic to build and create a website with pages, titles, images, videos and text. • Use wireframes to plan the build for an app. • Work collaboratively, using various tools independently for use in an app design. • Recognise my audience when designing and creating a website.	•Create simple variables and understand its their role in a program. •Use logical reasoning to detect and correct errors in algorithms. •Work independently on a topic to build and create a website with pages, titles, images, videos and text. •Recognise the audience when designing and creating an app/website. •Create variables in spreadsheets and understand their role in a program.
Digital Literacy	•Explain why work created using technology belongs to you. •Describe why other people's work belongs to them and recognise that content on the internet may belong to other people. •Explain how other people's identity online can be different to their identity in real life.	•Explain how devices can connected to the internet and can list some of those devices. •Identify different ways we communicate online. •Explain why it is important to be considerate and kind to people online in ways that do not upset others. •Recognise that there may be people online who could	•Describe how to search for information within a wide group of technologies (e.g. social media, image sites, video sites). • Explain why copying someone else's work from the internet without permission can cause problems. • Describe ways people who have similar likes and	• Describe ways technology can affect health. • Explain the importance of self-regulating the use of technology. • Explain how my online identity can be different from the identity presented in real life and describe the right decisions about how to interact with others and how others perceive us.	•Describe ways technology can affect health and know strategies, tips or advice to promote healthy living. •Explain the importance of self-regulating my use of technology and demonstrate the strategies to do this. •Describe common systems that regulate age-related content (e.g. PEGI, BBFC,	• Describe ways in which media can shape ideas about gender. • Describe issues online that might make me or others feel sad, worried, uncomfortable or frightened. • Demonstrate responsible choices about my online identity, depending on context.

	• Give examples of issues online that might make me feel sad, worried, uncomfortable or frightened and give examples of how you might get help. • Recognise examples of information that is personal and what information not to put online. • Recognise that information about me can stay online for a long time and could be copied. • Describe what information not put online without asking a trusted adult first. • Explain rules and give examples to keep us safe when we are using technology both in and beyond the home.	make me feel sad, embarrassed or upset. • Use the internet to communicate with people you don't know well and give examples of how you might use technology. • Give examples of bullying behaviour and how it could look online and how it can make someone feel. • Talk about how someone can/would get help about being bullied online or offline. • Use simple keywords in a search engine to find things out. • Navigate a simple webpage to get to information needed (e.g. home, forward, back buttons; links, tabs and sections). • Describe and demonstrate how to get help from a trusted adult if I find content that makes me feel sad, uncomfortable worried or frightened.	interests can get together online. • Explain what autocomplete is and how to choose the best suggestion. • Explain how the internet can be used to sell and buy things. • Explain why lots of people sharing the same opinions or beliefs online does not make those opinions or beliefs true. • Use search engines effectively and narrow search results down. • Analyse information and have ways to check its credibility. • Be sceptical of things I find online such as autography.	• Recognise the need to be careful before sharing anything online and only with people you can trust. • Understand and give reasons why strong passwords are important and describe simple strategies for creating and keeping passwords private. • Understand the different types of social media platforms and how they are used for communication. • Explain what bullying is and can describe how people may bully others. • Describe rules about how to behave online and how to follow them. • Explain why you need to think carefully about how content you post might affect others, their feelings and how it may affect how others feel about them (their reputation). • When searching on the internet for content to use, explain why you need to consider who owns it and whether you have the right to reuse it. • Use search engines effectively and narrow search results down.	parental warnings) and describe their purpose. • Understand that there are many positives and negative to using social media. • Describe some simple ways that help build a positive online reputation. • Evaluate digital content and explain how to make choices from search results. • Explain how search engines work and how results are selected and ranked. • Demonstrate strategies to enable you to analyse and evaluate the validity of 'facts'. • Assess and justify when it is acceptable to use the work of others and give examples of content that is permitted to be reused. • Demonstrate the use of search tools to find and access online content which can be reused by others. • Demonstrate how to make references to and acknowledge sources that have been used from the internet.	• 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 either by accident or on purpose). • Explain how impulsive and rash communications online may cause problems (e.g. flaming, content produced in live streaming). • Create and use strong and secure passwords and use different ones for a range of online services. • Describe ways in which some online content targets people to gain money or information illegally and describe strategies to identify such content (e.g. scams, phishing). • Describe how to get help for someone that is being bullied online and assess when to do or say something or tell someone. • Identify a range of ways to report concerns both in school and at home about online bullying. • Make positive contributions and be part of online communities and describe how to collaborate with others positively. • Access and justify when it is acceptable to use the work of others. • Explain how search engines work and how results are selected and ranked.

Skills Progression by Year Group and Topic:

<u>Year 1</u>

What is a Computer?
Information Technology

- Create digital books combining text, images, and sounds.
- Type words correctly using a keyboard.
- Combine text and images to create video presentations.
- Edit video content to improve it.

Computer Science

- Identify, name and explain the functions of the main components of a computer.
- Name and compare common input and output devices of computer systems.
- Identify and describe uses of technology beyond school.
- Explain how robots can be controlled.

Digital Literacy

- Explain how devices can be connected to the internet and can list some of those devices.

Magical Story Telling
Information Technology

- Combine images, text and voice recordings to retell a story.
- Combine images and edit text to create posters and invitations.
- Use digital drawing tools to draw characters from a story or for a game.
- Type words correctly using a keyboard.
- Create a simple animation with moving characters and voice recordings.

Digital Literacy

- Describe why other people's work belongs to them and recognise that content on the internet may belong to other people.

A Rare Species of Bird
Information Technology

- I can create digital books combining: text, images, and sounds
- I can type words in a speech bubble using a keyboard
- •I can create a simple animation with moving characters and voice recordings

Year 2
Me and my Selfie
Information Technology

- Use a camera to capture images which are in focus.
- Select options to change the appearance of digital content.
- Apply edits to digital content to achieve a particular effect.
- Combine words and images to create Word Art.

Digital Literacy

- Explain how other people's identity online can be different to their identity in real life and how they might make themselves look different.
- Give examples of issues online that might make me feel sad, worried, uncomfortable or frightened; I can give examples of how I might get help (speak to adult I can trust).
- Recognise examples of information that is personal to me (name, address, birthday, age, where I go to school).
- Recognise that information about me can stay online for a long time and could be copied.
- Describe what information not to put online without asking a trusted adult first.

Wanted, Dragon
Information Technology

- Create posters by adding images to frames, editing text by changing font style, colour and size.
- Create images with different layers by placing one image on top of another.

- Create a simple animation with moving characters and voice recordings.
- Combine words and images to create Word Art.
- Create a visual plan using images and text to tell a story.
- Create a simple presentation using slides.
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Computer Science

- Design and create programs for others to play.

Digital Literacy

- Explain why work created using technology belongs to you and say why it belongs to you (e.g. 'it is my idea' or 'I designed it').
- Describe why other people's work belongs to them and recognise that content on the internet may belong to other people.

Strange Creatures
Information Technology

- Collect images by capturing screenshots and editing them.
- Present information on a topic using images, text boxes and voice recordings.
- Create a simple animation with moving characters and voice recordings.
- Combine text and images to create video presentation.
- Edit video content to improve.

Digital Literacy

- Use simple keywords in a search engine to find things out.
- Navigate a simple webpage to get the information I need (e.g. home, forward, back buttons; links, tabs and sections).
- Describe and demonstrate how to get help from a trusted adult or helpline if I find content that makes me feel sad, uncomfortable worried or frightened.
- Explain the difference between things that are imaginary, 'made up' or 'make believe' and things that are 'true' or 'real'.

Year 3

Bring it to life
Information Technology

- Plan a simple animation using a storyboard
- Take a series of pictures and combine them to form an animation.
- Add text, graphics and sound effects to improve an animation using editing tools.
- Create an animation with moving characters/objects keeping the camera steady using 'onion skinning'.

Born to be an Artist
Information Technology

- Use a camera accurately to capture interesting perspectives on objects.
- Select options to change the appearance of digital content and explore tools to edit it.
- Apply edits to digital content to achieve a particular effect and save them as both images and videos.
- Create galleries that include images and videos effects.
- Plan a movie which has a beginning, middle and end.

My Very own Game
Information Technology

- Remove the background from images
- Use photo editing tools to improve images.
- Create digital books/posters by combining text, images, voice recordings, and videos.
- Create a video by combining text, images and music.
- Use a keyboard accurately with two hands to type and format documents.

Computer Science

- Design and create a prototype game and make improvements following feedback.
- Review a game and make improvements by debugging.
- Create a program using a range of events/inputs to control what happens.
- Work with various forms of input/output.

Digital Literacy

- Explain why spending too much time using technology can sometimes have a negative impact and can give examples of activities where it is easy to spend a lot of time engaged online (e.g. games, films, videos).
- Describe and explain 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.

Year 4

My Hero

Information Technology

- Combine text (fonts, colours, backgrounds), images, voice recordings and videos to create a digital book.
- Edit digital content to improve it according to feedback.
- Create and edit a video by combining text, music, and images.
- Design and create digital logos and graphics combining fonts and text.
- Create a contents page, a blurb and add page numbers.

Digital Literacy

- Describe how I can search for information within a wide group of technologies (e.g. social media, image sites, video sites).
- Explain why copying someone else's work from the internet without permission can cause problems and give examples of what those problems might be.

New Country
Information Technology

- Use the camera accurately to create a short clip for editing.
- Plan videos content by using scripts.
- Combine animated characters and voice recordings for particular effects.
- Edit digital content to improve it, according to feedback.
- Plan a movie with scripts that have a beginning, middle and end and combines text, music, and images.

Digital Literacy

- Explain why copying someone else's work from the internet without permission can cause problems and give examples of what those problems might be.
- When searching on the internet for content to use, explain why you need to consider who owns it and whether you have the right to reuse it and give some simple examples.

The Robots are Coming
Computer Science

- Create simple programs.
- Debug an error in a simple algorithm.
- Understand that instructions in an algorithm need to be precise and unambiguous.
- Use logical reasoning to predict the behaviour of simple programs.
- Use basic selections in programs and explain using the language if … then.

Year 5

Who wants to play?
Information Technology

- Identify the pros and cons of different games.
- Use creative tools to create a marketing campaign for a game.
- Design and create 8-bit characters.
- Combine text and images to create posters.
- Plan and create a video by combining images, text, music and different layouts.
- Use word processing tools to format a document.

Computer Science

- Work independently to design and program a game for a specific audience.
- Program a game which tells a story over more than one level.
- Experiment with different codes to test each element of a game until the desired outcome is reached.
- Make predictions about what will happen in a program when inputs are changed.
- Test, debug and improve programs.

Digital Literacy

- Describe ways technology can affect healthy sleep and strategies, tips or advice to promote healthy sleep with regards to technology.
- Explain the importance of self-regulating my use of technology and demonstrate the strategies I use to do this (e.g. monitoring my time online, avoiding accidents).
- Describe common systems that regulate age-related content (e.g. PEGI, BBFC, parental warnings) and describe their purpose.

Bring it to Life Again
Information Technology

- Plan a multi-scene animation including characters, scenes, camera angles and effects.
- Edit a stop-go animation to improve the quality of the animation using onion skinning feature.
- Edit/refine a movie to add special effects, text, sound effects, graphics and backing track.

Digital Literacy

- Evaluate digital content and explain how to make choices from search results.
- Explain how search engines work and how results are selected and ranked.

It's time to move it.
Information Technology

- Present understanding of new programming concepts with digital tools.

Computer Science

- Use selections and procedures in programs.
- Create programs including repeat commands.
- Create simple variables and understand their role in a program.
- Use logical reasoning to detect and correct errors in algorithms.

Year 6

Digital Apprentice
Information Technology

- Evaluate my own content against success criteria and make improvements accordingly.

Computer Science

- Use wireframes to plan the build for an app.
- Work collaboratively, using various tools independently for use in my app design.
- Recognise my audience when designing and creating an app.

Digital Literacy

- Assess and justify when it is acceptable to use the work of others and give examples of content that is permitted to be reused.
- Demonstrate the use of search tools to find and access online content which can be reused by others.
- Demonstrate how to make references to and acknowledge sources that have been used from the internet.

How do computers Impact on our Lives?
Information Technology

- Work independently to create a presentation that includes graphics, and images.
- Make a presentation to an audience using digital tools.

Computer Science

- Describe the impact of technology on society.
- Understand about e-commerce - what it is and its impact.
- Investigate the services offered by the internet.
- Understand about different types of robotics and how they can impact our lives.
- Understand about the advancements in technology and the impact this has had on society.

Digital Literacy

- Understand that there are many positives and negatives to using social media.
- Describe ways that information about people online can be used by others to make judgments about an individual.
- Describe some simple ways that help build a positive online reputation.

Define the terms 'influence', 'manipulation' and 'persuasion' and explain how these might be encountered online (e.g. advertising and 'ad targeting').

It's My Business.
Information Technology

- Design a suitable brand for a business and promote it.
- Create a spreadsheet with formulas for profit and loss of a business.
- Work independently to create a presentation that includes graphics, images and movies.
- Design and build a webpage and share it online.
- Make a presentation to an audience using digital tools.

Computer Science

- Create variables in spreadsheets and understand their role in a program.

Digital Literacy

- Access and justify when it is acceptable to use the work of others.
- Explain how search engines work and how results are selected and ranked.