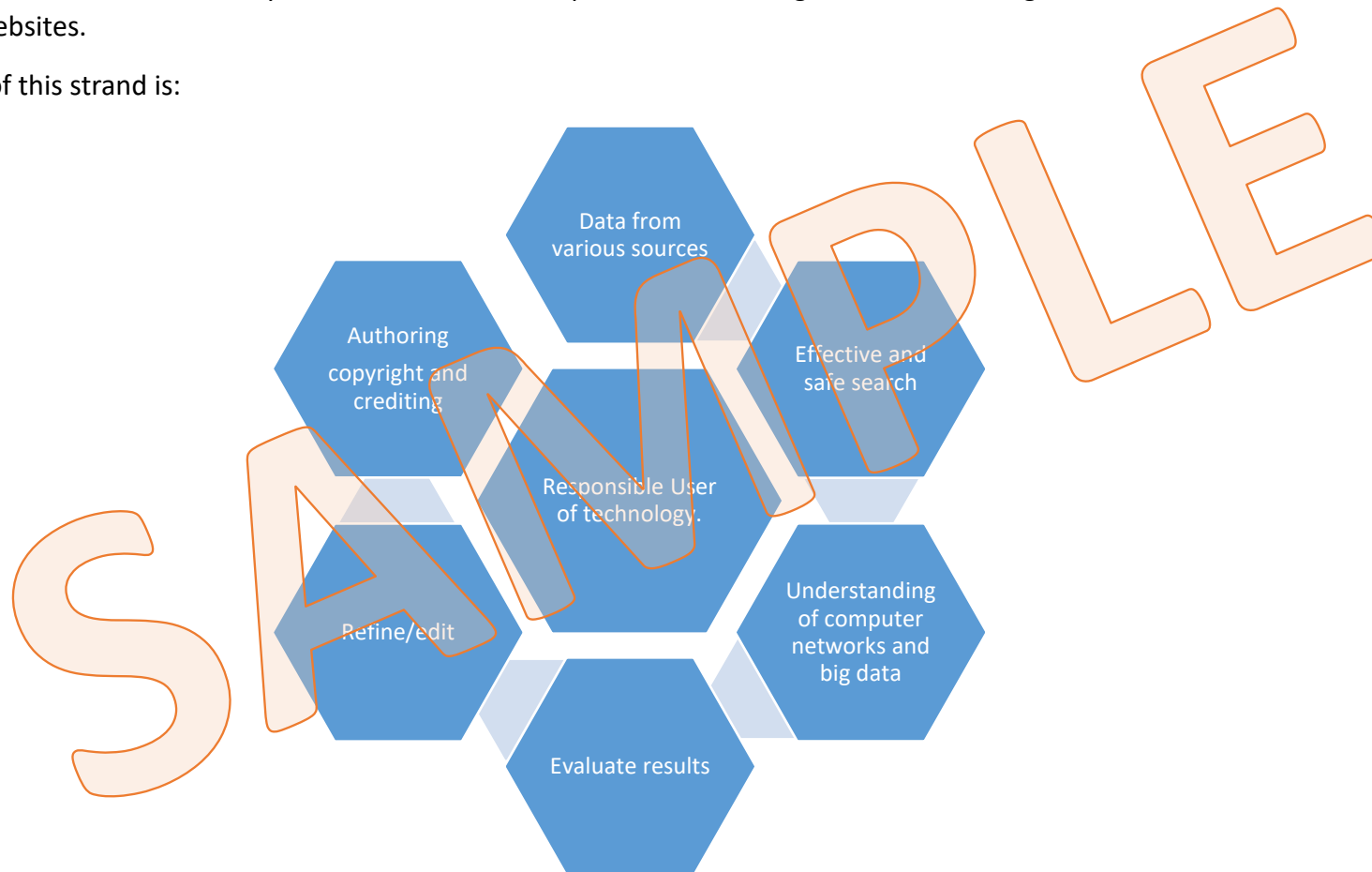


Progression paper for Digital research

The main focus of this strand is on becoming a discerning, safe and responsible users of online technologies; derive data from a number of sources, including pictorial; use digital research tools effectively, understanding broadly how they work and considering factors affecting search results; evaluate the resulting data, refining and editing it to make it their own. Increasingly understand intellectual property and copyright, crediting the sources they use appropriately. The skills linked to this unit are progressive across the key stages but can be further enhanced by cross- curricular computing work. In order to critically analyse the sources and their credibility; it is essential to develop an understanding of how search engines work, cookies and their uses and an understanding of ranking the websites.

The main focus of this strand is:

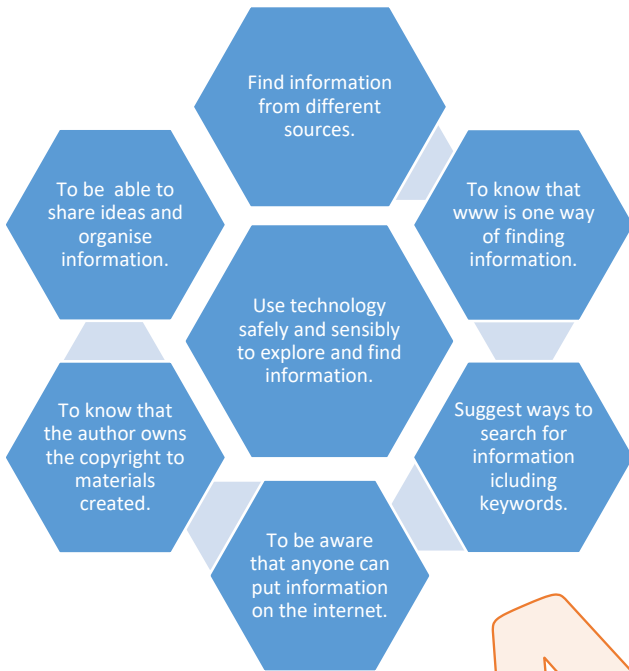


Overview of Key elements within the progression of Digital Research theme	EYFS	KS1 Starting Research	LKS2 Accuracy counts	LKS2 Authoring	UKS2 Data Matters	UKS2 Staying connected
Understand digital search technologies and tools		√	√		√	√
Research and evaluate digital content	√	√	√		√	√
Combine researches from different sources		√	√		√	√
Edit and refine search material to make it their own		√	√	√	√	√
Overview of Key e-Safety elements						
Safe and respectful use, respecting copyright and ownership	√	√	√	√	√	√
Recognise acceptable and unacceptable behaviour	√	√	√	√	√	√
Keep e-Safe, know how to seek help and keep personal details private	√	√	√	√	√	√
Careful and respectful use of technology and online services	√	√	√	√	√	√
Digital devices, file sizes and types, software and systems	√	√	√	√	√	√
Investigate technology in the world – its use and its history	√	√	√	√	√	√

Progression statements for Digital research		
KS1	LKS2	UKS2
Starting Research	Accuracy counts	Data matters Staying connected
<u>Summary of progression statements in KS1</u>	<u>Summary of progression statements in LKS2</u>	<u>Summary of progression statements in UKS2</u>
<p>Children develop understanding of researching using non-digital and digital sources, including the World Wide Web. They understand the need to check their research results. They present their research. They use charts, graphs and mind maps. They begin to respect copyright and ownership and know who to talk to if they are worried.</p>	<p>Children discuss computer networks including the internet and the services it offers. They explore how search engines work and what influences results, evaluating search engines and using sources. They learn about the threat from computer viruses and develop understanding of intellectual property and relate this to their own content. They use spreadsheet software to create graphs and to explore number patterns.</p>	<p>They search more efficiently and investigate their digital footprints (or 'digital tattoos'), building safe and responsible use of online spaces. They create and search flat-file databases, developing accuracy and efficiency.</p> <p>Children develop safe and appropriate use of online technologies, considering what they can use and what information is shared about them. They create blogs for school projects, checking and uploading digital content. They understand how a wiki works and the benefits of collaborative working. They know the school's e-Safety rules and are proactive in encouraging other children to keep safe online.</p>

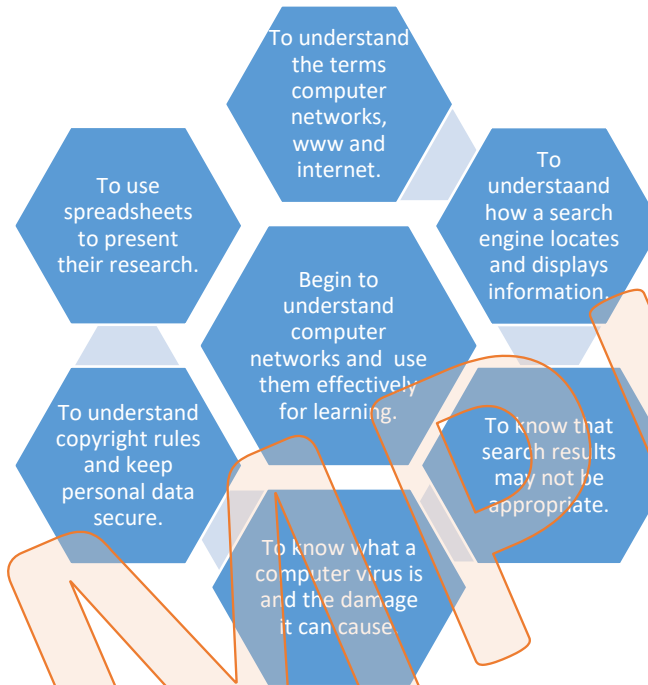
SAMPLE

Summary of progression statements in KS1



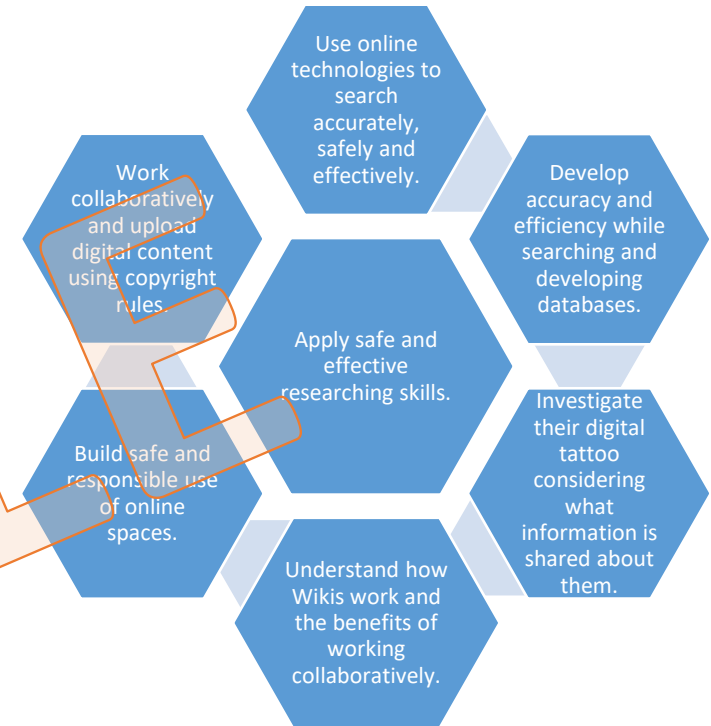
- Explore finding information from different sources (digital and non-digital)
- Know that we can find information on the World Wide Web
- Suggest ways to find information on a specific site, including using keywords
- Be aware that anyone can put information on the internet and that it may not be true
- Use simple software to share ideas and organise information
- Be aware that they own materials they create
- Know who to talk to if any technology or online system makes them feel worried or uncomfortable

Summary of progression statements in LKS2



- Talk about services on the internet including the World Wide Web
- Know the web uses hyperlinks to connect millions of websites
- Understand how a search engine locates and displays information
- Know a search engine uses key words to locate information from websites
- Know search results may not be relevant or appropriate and should be checked
- Use key words to find relevant information
- Understand what a computer virus is and the damage it can do

Summary of progression statements in UKS2



- Understand how big data is used in the real world
- Understand how file extensions are used
- Understand that devices on a network have an IP address, locate examples
- Know data is analysed to provide information and this can be positive or negative
- Explain in simple terms how a search engine retrieves data
- Use search operators and linked searches effectively to locate required information
- Know how their digital tattoo is created
- Construct different types of question; use to structure a database
- Use databases to organise, refine analyse data

<ul style="list-style-type: none"> • Use technology safely and sensibly • Discuss how they use technology in and beyond school 	<ul style="list-style-type: none"> • Show understanding of school e-Safety rules for copyright and personal data • Understand data is held about us on internet; keep our own data secure • Enter and format data in a spreadsheet • Create appropriate graphs/charts • Use arithmetic operators in formulae • Check data for reliability and accuracy • Discuss how they use internet in and beyond school for their learning 	<ul style="list-style-type: none"> • Present answers/conclusions in suitable formats, support by appropriate graphs • Understand how to identify and correct inaccurate/implausible data in a database • Understand and apply the school's eSafety rules, consistently especially those for copyright and personal data • Understand why sites have age restrictions • Know devices provide location details, identify advantages and disadvantages • Understand blogs are online spaces with sets of personal entries, usually allowing comments • Understand micro blogs allow users to make short posts online • Understand that a wiki is a tool for organising and validating collaborative information • Ensure the quality of information/ideas shared in blogs/wikis; check bias/accuracy/relevance • Adjust language/style for context/audience • Know/apply school eSafety rules, including personal data and appropriate online use • Recognise acceptable and unacceptable behaviour on- and off-line • Use efficient/reliable methods to search online • Identify a range of ways to report concerns about content and contact on the internet • Critically evaluate their work using peer and self-review to modify and improve it • Save and organise their work on and offline using appropriate names and structure. • Compare their use of communication and collaboration tools in and beyond school
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SAMPLE

Reinforcing the elements of Digital research across the curriculum

The skills learnt in this unit are revisited flexibly across most computer curriculum themes. These can also be easily transferred across various cross-curricular projects. For the pupils to progress as reliable researchers, they should use and apply the skills acquired in this strand regularly in different contexts and areas of curriculum; critically evaluating and revisiting reliable and efficient methods.