Broadway Junior School

Subject: Computing Topic: Effective searching Year: 4 Term: Summer 2

NC Purpose of Study
A high-quality computing education equips pupils to use computational thinking and creativity to understand and change the world. Computing has deep links with mathematics, science and design and technology, and provides insights into both natural and artificial systems. 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. Building on this knowledge and understanding, pupils are equipped to use information technology to create programs, systems and a range of content. Computing also ensures that pupils become digitally literate – able to use, and express themselves and develop their ideas through, information and communication technology – at a level suitable for the future workplace and as active participants in a digital world.

Intent	Implementation	Impact
Our vision at Broadway Junior School is that all pupils should enjoy Computing and become confident, passionate and responsible users of technology both inside and outside of school. Through interesting, relevant and inclusive lessons, they will be able to leave Year 6 with a good understanding of how computers and the Internet work, along with being able to complete tasks on them creatively, independently and reflectively for a range of purposes and audiences. The Computing curriculum at Broadway is designed to enable pupils to embrace and utilise new technologies through the application of essential knowledge, principles and concepts. Technology is everywhere and will play a pivotal part in students' lives, therefore, we want to model and educate our pupils on how to use technology positively, responsibly and safely. We want our pupils to be creators, not just consumers of content and our broad curriculum encompassing 'Coding & Computational Thinking', 'Information Technology', 'Computing Systems & Networks' and 'Online Safety' reflects this. We recognise that the best prevention for a lot of issues we currently see with technology and social media is through education.	Computing skills are taught explicitly at Broadway with every pupil receiving dedicated Computing lessons throughout each half-term. Each half-term has a focus on either Information Technology, Coding & Computational Thinking or Computing Systems & Networks with Online Safety lessons also included throughout each half-term. The skills acquired are then embedded throughout the curriculum. Learning is sequenced to build knowledge, skills and vocabulary. Throughout units of work teachers encourage children to make links between past learning and new content. We recognise prior learning and build on it with memorable learning experiences and provide targeted support where necessary. The units address the requirements of the National Curriculum and are broken down to cover all elements of the different strands of Computing. The progression of knowledge and skills statements build year on year to deepen and challenge our learners. We use Purple Mash as the core of our curriculum tied with Teach Computing and activities from Project Evolve to create a comprehensive curriculum providing full curriculum coverage and a variety of skills for our children.	The impact of our Computing curriculum is that we provide pupils with a set of skills to embed a lifelong love of learning and that they build on the knowledge and skills from previous learning. We ensure that every child can become a confident user of technology, while being able to use it to accomplish a wide variety of goals, both at home and in school. Children will have a secure and comprehensive knowledge of how technology works in the world around them and will develop their understanding of how to deal with online situations safely. Children will become confident global citizens. The knowledge organisers outline what we want the children to know within each unit. By nature Computing is going to be practical and hands on. We give the children the opportunity to record individually their responses to key questions. Teachers ensure that children understand and apply the correct vocabulary linked to different elements of the curriculum and this is also recorded within the floor books. Prior and future learning links are also included, so that there is a clear sequence in relation to the progression of skills and activities.

Key Vocabulary
Crawl How a search engine explores the web to find pages. Index The search engine's database of all the pages it has found. Virtual Assistant Device A computer program (software) that listens to your voice and answers questions or does tasks, like Alexa or Siri. Exact Match Keywords Relevance Fake News Rank Search Engine Filter Snippet Reliable Source Search Bar Website Internet

Knowledge	Skills
• To understand what a search engine is, how it works and how to use simple keywords to find information online. • To understand how search engines collect, sort and rank results, and why some results appear first. • To learn advanced ways to improve searches so we can find the most accurate and useful results quickly. • To develop strategies to judge whether information online is true and if sources can be trusted.	• I can name at least one search engine. • I can describe how a search engine finds and shows information. • I can use simple keywords to look something up online. • Preparation • I can explain that search engines find and sort information from many websites. • I can refine a search to make it more specific. • I can use filters to find the type of results I need (e.g. images, news, videos, date). • I can check result snippets before clicking to choose the most useful link. • I can describe in simple terms how search engines decide the order of results. • I can explain why the first result might not always be the best. • I can tell the difference between a fact, an opinion and a belief. • I can explain what fake news is and why someone might create it.

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	• I can use clues to decide if something online is trustworthy or not.

Learning Objectives/End Points			
To understand what a search engine is, how it works and how to use simple keywords to find information online. Lesson 1	To understand how search engines collect, sort and rank results, and why some results appear first. Lesson 2	To learn advanced ways to improve searches so we can find the most accurate and useful results quickly. Lesson 3	To develop strategies to judge whether information online is true and if sources can be trusted. Lesson 4

Careers

Linking Curriculum Learning to Careers
Discuss how the skills developed in this unit are used in a range of careers, including:

Search Engine Developer
Web Developer
Software Engineer
Computer Programmer
Cybersecurity Specialist
Data Analyst
Digital Researcher
Journalist
Librarian
Teacher
Scientist
Market Researcher
Fact Checker

Transferable skills Digital literacy: using search engines and online tools effectively and safely.
Research skills: finding relevant information using keywords and search filters.
Critical thinking: questioning information and recognising that the first search result is not always the most suitable.
Fact-checking: distinguishing between fact, opinion and belief, and identifying potential fake news.
Decision-making: selecting appropriate sources based on relevance and reliability.
Problem-solving: refining searches when results are unclear or unhelpful.
Communication: explaining why a source is trustworthy and sharing findings clearly.
Digital responsibility: understanding the importance of using reliable information and behaving safely online.

Learning from career and labour market information
Children explore how search engines and online information are used in modern workplaces. They consider why digital research skills are important in careers such as journalism, teaching, marketing, science and technology.

Addressing the needs of each pupil
Children practise searching at an appropriate level, using accessible instructions, vocabulary support and guided activities. They develop confidence in refining searches, applying filters and identifying reliable information, with opportunities for additional challenge.

Linking curriculum learning to careers
Children apply computing and digital literacy skills to search for information, interpret results and evaluate online sources. They make links to careers such as web developer, researcher, journalist, librarian and cybersecurity specialist.

Encounters with employers and employees
Children consider how professionals use search engines to gather evidence, check facts and make informed decisions. Learning could be extended through a guest speaker or case study featuring a journalist, researcher or digital professional.

Experiences of workplaces
Children experience research tasks similar to those undertaken in workplaces, refining keywords, using filters, comparing results and checking the reliability of sources. They learn that accurate information gathering is important for effective decision-making.

Encounters with further and higher education
Children begin to understand that digital research, computing and information literacy support further study in subjects such as computer science, media, science and business. They recognise that these skills can be developed through future education and training.