Broadway Junior School

Subject: Computing Topic: Concept maps Year: 5 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
Concept Map Node Connecting Line Node Settings Template Structure 2Connect Present

Knowledge	Skills
• To understand what a concept map is and why they can be useful. • To understand the different ways that concept maps can be used. • To plan and create a non-fiction concept map. • To present a concept map on a specific topic to an audience.	• I can explain what a concept map is. • I understand that 2Connect is a type of concept mapping software. • I can use the advanced mode of 2Connect to experiment with creating a concept map of my own. • I understand that concept maps can be used in different ways. • I can recognise when a template can be used to help structure ideas. • I understand why it is important to organise information clearly. • I understand why it is important to break information down into manageable chunks. • I can build a concept map that can be used as a tool to present. • I can organise ideas in a concept map depending on its purpose. • I understand some of the techniques used to give an effective presentation. • I can present information clearly.

Broadway Junior School

Subject: Computing Topic: Concept maps Year: 5 Term: Summer 2

Learning Objectives/End Points			
To understand what a concept map is and why they can be useful. Lesson 1	To understand the different ways that concept maps can be used. Lesson 2	To plan and create a non-fiction concept map. Lesson 3	To present a concept map on a specific topic to an audience. Lesson 4

Careers

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

Teacher – Organizes lessons and helps students connect ideas.
Nurse – Maps symptoms, diagnoses, treatments, and patient information.
Software Developer – Plans how different parts of a program or system connect.
Business Manager – Organizes business processes, goals, and relationships.
Psychologist – Maps relationships between thoughts, emotions, behaviours, and experiences.

- Transferable skills Organisation: structuring information into clear categories and manageable sections.
- Digital literacy: using concept-mapping software to create and present ideas.
- Critical thinking: identifying connections and relationships between different pieces of information.
- Communication: explaining ideas clearly through visual maps and spoken presentations.
- Planning: using templates and concept maps to organise information before completing a task.
- Creativity: selecting suitable layouts and structures to communicate ideas effectively.
- Problem-solving: deciding how best to organise complex information for a particular purpose.
- Presentation skills: speaking clearly, structuring information logically and engaging an audience.

Learning from career and labour market information
Children explore how professionals use concept maps to plan projects, organise information and communicate complex ideas. They consider how these skills are useful in careers such as teaching, project management, research and digital design.

Addressing the needs of each pupil
Children use templates, visual prompts and structured tasks to organise their ideas in manageable chunks. They can choose topics that interest them and develop their confidence in planning, creating and presenting concept maps, with opportunities for additional support and challenge.

Linking curriculum learning to careers
Children apply computing, English and subject knowledge to create non-fiction concept maps. They organise information using nodes and connecting lines, identify relationships between ideas and present information clearly, linking their learning to careers in education, research, business and communication.

Encounters with employers and employees
Children learn how professionals use visual planning tools to organise ideas and explain information. Learning could be extended through a case study or guest speaker from a career such as project management, teaching, marketing or scientific research.

Experiences of workplaces
Children experience a simplified workplace task by planning a concept map for a particular purpose, organising key information and presenting their ideas to an audience. They learn how visual tools can support planning, collaboration and communication.

Encounters with further and higher education
Children recognise that computing, English and presentation skills support further study in subjects such as business, media, science and information technology. They begin to understand how these skills can be developed through further education and vocational training.