

Curriculum Overview for Computing

Year 6

Unit	Expectations	Computing PoS	Software/Apps	Hardware
6.1 We are app planners Planning the creation of a mobile app	 Develop an awareness of the capabilities of smartphones and tablets. Understand geolocation, including GPS. Identify interesting, solvable problems. Evaluate competing products. Pitch a proposal for a smartphone or tablet app. 	 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. Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content. 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. Work with various forms of input and output. 	Software: App Inventor/ TouchDevelop, Picasa Web, Google Drive Presentation/ Prezi or similar Apps: Codea, TouchDevelop	Computers and tablets or smartphones (can be done with a phone emulator)
6.2 We are project managers Developing project management skills	Scope a project to identify different components that must be successfully combined. Identify their existing talents and plan how they can develop further knowledge and skills. Identify the component tasks of a project and develop a timeline to track progress. Identify the resources they'll need to accomplish a project. Use web-based research skills to source tools, content and other resources. Consider strategies to ensure the quality of a collaborative project.	 Solve problems by decomposing them into smaller parts. 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. Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact. Be discerning in evaluating digital content. Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs. 	Software: Google Apps for Education/ VLE/GitHub/Basecamp Apps: Web browser (Safari)	Laptop or desktop computers, internet access
6.3 We are market researchers Researching the app market	Create a set of good survey questions. Analyse the data obtained from a survey. Work collaboratively to plan questions. Conduct an interview or focus group. Analyse and interpret the information obtained from interviews or a focus group. Present their research findings.	 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. Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact. 	Software: Google Drive applications/ Microsoft Office, Microsoft Windows Movie Maker® Apps: Web browser, Keynote, iMovie	Laptop/desktop computers, internet access

6.4 We are interface designers Designing an interface for an app	Work collaboratively to design the app's interface. Use wireframing tools to create a design prototype of their app. Develop or source the individual interface components (media assets) they will use. Address accessibility and inclusion issues. Document their design decisions and the process they've followed.	 Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts. Use sequence, selection, and repetition in programs; work with variables and various forms of input and output. Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs. 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. Be discerning in evaluating digital content. Recognise acceptable/unacceptable behaviour. 	Software: Justinmind Prototyper/Pencil Project/Microsoft PowerPoint® Apps: SketchyPad or iMockups (pay-for apps)	Laptop/desktop/ tablets
6.5 We are app developers Developing a simple mobile phone app	Become familiar with another programming toolkit or development platform. Import existing media assets to their project. Write down the algorithms for their app. Program, debug and refine the code for their app. Thoroughly test and evaluate their app.	 Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts. Use sequence, selection, and repetition in programs; work with variables and various forms of input and output. Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs. 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. 	Software: App Inventor/ TouchDevelop Apps: TouchDevelop/ Codea	Computers and tablets/ smartphones/ phone emulator
6.6 We are marketeers Creating video and web copy for a mobile phone app	Consider key marketing messages, including identifying a unique selling point. Develop a printed flyer or brochure incorporating text and images. Further develop knowledge, skills and understanding in relation to creating a website. Further develop skills relating to shooting and editing video.	 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. Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content. Select, use and combine a variety of software (including internet services) to design and create content that accomplishes given goals, including collecting, analysing, evaluating and presenting information. Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact. 	Software: Microsoft Publisher™, WordPress/Google Sites, Movie Maker® and other programs chosen by the pupils Apps: Pages, WordPress, iMovie and other apps chosen by the pupils	Laptops/ desktop computers, cameras