



This document should help you map in some of the new computer science requirements. Programming is a small element of the curriculum which is why some of the requirements have been highlighted in red because they will fit in other areas such as computer hardware. You can find the full scheme of work by [clicking here](#).

National Curriculum Framework	Touch Develop Lesson	What students learn here?
Design, use and evaluate computational abstractions that model the state and behaviour of real-world problems and physical systems		
Understand several key algorithms that reflect computational thinking, such as ones for sorting and searching; use logical reasoning to compare the utility of alternative algorithms for the same problem	Algorithm PowerPoint Algorithm Video (Lesson 11) Cup of Tea Algorithm Cup of Tea Instructions Write own Algorithm	Students will learn about algorithms in this lesson and they will be expected to write their own. Once they have written their own on paper, they're expected to recreate one using Touch Develop.
Use two or more programming languages, at least one of which is textual, to solve a variety of computational problems; make appropriate use of data structures such as lists, tables or arrays; design and develop modular programs that use procedures or functions	Lesson 1 Vid – Backgrounds Lesson 2 Vid – Sprites Lesson 3 Vid – Loops Lesson 4 Vid – Events Lesson 5 Vid – How to update text. Uses a String data type. Lesson 6 Vid – How to set up a function which returns a value. Lesson 7 Vid – How to use a string collection data structure. Lesson 8 Vid – How to use a table data structure. Lesson 9 Vid – How to update a table data structure. Lesson 10 Vid – How to use Logic in code. Lesson 11 Vid – How to use Algorithms.	<p>Students learn how to build basic applications.</p> <p>Touch Develop is a textual programming language but it is also visual. You can type out the code or you can click the buttons to help with the compiling.</p> <p>Some of these lessons show you how to design a procedure / function and also show you how you can build an array.</p>
Understand simple Boolean logic (such as AND, OR and NOT) and some of its uses in circuits and programming	Logic Gates work sheet Logic Gates Video (Lesson 10) Logic Gates PowerPoint Presentation. - For example if something is True or False what will the reaction be? This simple lesson teaches you Boolean logic.	Circuits will not be used through this lesson but students will learn about Boolean logic through a number of lessons.
Understand the hardware and software components that make up computer systems, and how they communicate with one another and with other systems		Not really appropriate for Touch Develop unless you are planning on getting your students to build applications which show how two devices communicate with each other.

<p>Understand how instructions are stored and executed within a computer system; understand how data of various types (including text, sounds and pictures) can be represented and manipulated digitally, in the form of binary digits</p>	<p>DataType – PowerPoint – PowerPoint which explains why data types are effective in programming and Touch Develop.</p>	<p>Data types are mentioned throughout the use of Touch Develop. Students need to understand the different data types for their application.</p>
<p>Understand and use binary digits, such as to be able to convert between binary and decimal and perform simple binary addition</p>		<p>Not really appropriate unless you are getting your students to make an app to convert binary / decimal.</p>
<p>Undertake creative projects that involve selecting, using, and combining multiple applications, preferably across a range of devices, to achieve challenging goals, including collecting and analysing data and meeting the needs of known users</p>	<p>Lesson 5 PowerPoint – This lesson gets students to come up with a brief for their game. They're then required to make storyboards to be signed off.</p> <p>Lesson 6 PowerPoint – Teach your students about pseudo before they start coding. Your students are required to plan out some of the bigger events so that they understand the logic.</p> <p>Lesson 7 PowerPoint of Videos.</p> <p>Lesson 8 PowerPoint – Introduces test plans to the students with some examples on screen. Make sure your students test their work thoroughly. This link into analysing and knowing the better needs.</p>	<p>Through some of the lessons students are developing a mobile phone application for a specific use.</p> <p>They're expected to build an application which will help a teacher and have an impact on the school.</p> <p>They will be using Test Plans and will be required to analyse the results to ensure that they work appropriately. Students will need to record the results from their testing in the test plan and they will need to record how they have made changes.</p> <p>Your students should write a 2 page report which shows how they have met their audience requirements and they can get the teacher / client to sign it off for completion.</p>
<p>Create, re-use, revise and re-purpose digital artefacts for a given audience, with attention to trustworthiness, design and usability</p>		<p>When using Touch Develop students can re-use a number of digital artefacts such as images, sounds and if they initialise it once, they can call on it to reappear rather than re-creating it over and over.</p> <p>Applications should have sketches and designs to support usability. How have your students thought about the audience? Is it appropriate? These lessons help the students think about this.</p>
<p>Understand a range of ways to use technology safely, respectfully, responsibly and securely, including protecting their online identity and privacy; recognise inappropriate content, contact and conduct and know how to report concerns.</p>		<p>When teaching your students about building applications, you should teach them about copyright. Students will go online and download images to use in their applications.</p> <p>If they want to use the applications with the Windows Store they should not pirate sounds or videos from other sources. Get your students to create a sources table for their images, sounds and videos.</p>