## Mersey Park Primary School Computing Long Term Overview – Year 6



Scheme of Work	Target Tracker Assessment Focus	Weaving Knowledge, Skills and Understanding	
Using Computer			
<ul> <li>Podcasting</li> <li>Create and Share Digital Artefacts</li> <li>Spreadsheet Modelling</li> </ul>	<ul> <li>Independently select, use and combine a variety of software to design and create content for a given audience, including collecting, analysing, evaluating and presenting data and information</li> <li>Design and create a range of programs, systems and content for a given audience</li> <li>Independently select, use and combine a variety of software to collect, analyse, evaluate and present data and information</li> </ul>	<ul> <li>Can they explore the menu options and experiment with images (colour effects, options, snap to grid, grid settings etc.)?</li> <li>Can they add special effects to alter the appearance of a graphic?</li> <li>Can they 'save as' gif or ipeg. wherever possible to make the file size smaller (for emailing or downloading)?</li> <li>Can they make an information poster using their graphics skills to good effect?</li> <li>Can they identify data error, patterns and sequences?</li> <li>Can they use the formulae bar to explore mathematical scenarios?</li> <li>Can they create their own database and present information from it?</li> <li>Can they present a film for a specific audience and then adapt same film for a different audience?</li> <li>Can they create a sophisticated multimedia presentation?</li> <li>Can they confidently choose the correct page set up option when creating a document?</li> <li>Can they confidently use text formatting tools, including heading and body text?</li> <li>Can they use the 'hanging indent' tool to help format work where appropriate (e.g. a play script)?</li> </ul>	
	e-Safety		
<ul> <li>Rising Stars Unit</li> <li>Podcasting</li> <li>Internet Research &amp; Online Safety</li> </ul>	<ul> <li>Use technology respectfully and responsibly</li> <li>Identify a range of ways to report concerns about content and contact in and out of school</li> </ul>	<ul> <li>Can they discuss the positive and negative impact of the use of ICT in their own lives and those of their peers and family?</li> <li>Do they understand the potential risk of providing personal information online?</li> <li>Do they recognise why people may publish content that is not accurate and understand the need to be critical evaluators of content?</li> <li>Do they understand that some websites and/or pop-ups have commercial interests that may affect the way the information is presented?</li> <li>Do they recognise the potential risks of using internet communication tools and understand how to minimise those risks (including scams and phishing)?</li> </ul>	

- Do they understand that some material on the internet is copyrighted and may not be copied or downloaded?
- Do they understand that some messages may be malicious and know how to deal with this?
- Do they understand that online environments have security settings, which can be altered, to protect the user?
- Do they understand the benefits of developing a 'nickname' for online use?
- Do they understand that some malicious adults may use various techniques to make contact and elicit personal information?
- Do they know that it is unsafe to arrange to meet unknown people online?
- Do they know how to report any suspicions?
- Do they understand they should not publish other people's pictures or tag them on the internet without permission?
- Do they know that content put online is extremely difficult to remove?
- Do they know what to do if they discover something malicious or inappropriate?
- Do they follow the school's safer internet rules?
- Can they make safe choices about use of technology?
- Do they use technology in ways which minimises risk, e.g. responsible use of online discussions, etc?
- Can they create strong passwords and manage them so that they remain strong?
- Can they competently use the internet as a search tool?
- Can they reference information sources?
- Can they use appropriate strategies for finding, critically evaluating, validating and verifying information, e.g. using different keywords, skim reading to check relevance of information, cross checking with different websites or other non ICT resources?
- Can they use knowledge of the meaning of different domain names and common website extensions (e.g. .co.uk; .com; .ac; .sch; .org; .gov; .net) to support validation of information?

Coding		
Spreadsheet Modelling Retro Game	<ul> <li>Include use of sequences, selection and repetition with the hardware used to explore real world systems</li> <li>Solves problems by decomposing them into smaller parts</li> <li>Create programs which use variables</li> <li>Use variables, sequence, selection, and repetition in programs</li> <li>Use logical reasoning to explain how increasingly complex algorithms work and to detect and correct errors in algorithms and programs efficiently</li> <li>Can they explain how an algorithm works?</li> <li>Can they explain how an algorithm works?</li> <li>Can they explain how an algorithm works?</li> <li>Can they detect errors in a program and correct them?</li> <li>Can they use an ICT program to control a number of events for an external device?</li> <li>Can they use ICT to measure sound, light or temperature using sensors and interpret the data?</li> <li>Can they explain how an algorithm works?</li> <li>Can they detect errors in a program and correct them?</li> <li>Can they use an ICT program to control a number of events for an external device?</li> <li>Can they use licT to measure sound, light or temperature using sensors and interpret the data?</li> <li>Can they explain how an algorithm works?</li> <li>Can they use incT from sensors to trigger events?</li> <li>Can they explain how an algorithm works?</li> </ul>	
Networks		
Podcasting Create and Share Digital Artefacts Retro Game	<ul> <li>Understand how computer networks enable computers to communicate and collaborate</li> <li>Begin to use internet services within his/her own creations to share and transfer data to a third party</li> </ul>	
Net Searching		
Create and Share Digital Artefacts Internet Research & Online Safety	<ul> <li>Be discerning when evaluating digital content</li> <li>Use filters in search technologies effectively and is discerning when evaluating digital content</li> <li>Can they contribute to discussions online?</li> <li>Can they use a search engine using keyword searches?</li> <li>Can they use complex searches using such as '+' 'OR' "Find the phrase in inverted commas"?</li> </ul>	