

Title: Incredible Inventors Programs: Pettson's Inventions Program		Year: 2 Duration: 1 week
Teaching Ideas	Subject	National Curriculum Objectives
<ul style="list-style-type: none"> <li>Introduce topic of Inventions</li> </ul> <p>Physically making invention for given task from given equipment E.g. Can children create a tower from spaghetti strands and marshmallows?</p> <ul style="list-style-type: none"> <li>(Introduce and reinforce vocabulary – reasoning and debugging) What do children think might be potential problems? After the task what problems did they face? Did they come across any problems? E.g. breaking spaghetti? How did they overcome these problems?</li> </ul> <p>Pettson's Invention Program:</p> <ul style="list-style-type: none"> <li>Set specific (differentiated) inventions to be solved.</li> <li>Introduce different items and discuss reasoning (logic), e.g. talk about purpose and importance and make predictions</li> <li>Using and applying – solving problems (Pettson's) <ul style="list-style-type: none"> <li>Children to write instructions on how to solve a specific level on Pettson's Inventions.</li> </ul> </li> </ul> <p>Children to use Telligarmi to narrate the instructions given for a given purpose e.g. for an I-Pad magazine. Explain how the programme works and what potential problems could be faced by the user.</p>	<p>Computing</p> <p>Links to: Mathematical- Problem solving.</p> <p><u>Resources</u></p> <p>Practical inventing equipment- e.g. spaghetti and marshmallows. I-Pads with Pettson's Invention Program. I-Pads with Telligarmi Program.</p> <p><u>Key vocab</u> <u>Algorithm</u> – an instruction/direction which achieves a goal</p> <p><u>Program</u> – when an algorithm/instruction is inputted on a digital device</p> <p><u>De-bugging</u>- Finding and removing bugs (problems) in a given programme.</p>	<ul style="list-style-type: none"> <li>To understand that programs execute by following precise and unambiguous instructions</li> <li>To create and debug simple programs</li> <li>To use logical reasoning to predict the behaviour of simple programs</li> </ul>