



Objectives		Extra Information																																				
Lesson 1 – Parent/Child Version.	<p>STARTING ACTIVITY – Times Tables Grid. (15 Minutes)</p> <p>GUIDANCE – Completing times tables grids can be used multiple times changing the numbers to produce new and differentiated grids. It can also be a timed activity with your child trying to improve upon their time with each iteration of the activity.</p> <p>Tell your child that multiplying quickly and efficiently requires a good knowledge of our times tables. With this in mind we are going to do a quick times tables grid to get our minds warmed up to work with times tables. If you completed our first Home Learning Kit this is the perfect opportunity to have your child compare their time completing the grid the first-time round to this time, along with the number they answered correctly (consider using stop watches for this activity).</p>	<p>Materials Required:</p> <ul style="list-style-type: none">✓ Function Machine worksheet (one per child)✓ Pencil✓ Plain paper for extension activity and plenary <p>Key Words:</p> <p>Function Machine</p> <p>Differentiation:</p> <ul style="list-style-type: none">✓ If your child is struggling work through questions together until they are confident enough to continue independently.✓ If your child is proficient with this task and you feel it is too easy pair up with them and take it in turns to create function machines to challenge each other. If during section one do single step machines; if during section two do multi-step function machines.																																				
L.O: To Understand Function Machines.	<table><tr><th>X</th><th>6</th><th>7</th><th>9</th><th>3</th><th>5</th></tr><tr><th>2</th><td></td><td></td><td></td><td></td><td></td></tr><tr><th>10</th><td></td><td></td><td></td><td></td><td></td></tr><tr><th>3</th><td></td><td></td><td></td><td></td><td></td></tr><tr><th>8</th><td></td><td></td><td></td><td></td><td></td></tr><tr><th>4</th><td></td><td></td><td></td><td></td><td></td></tr></table>	X	6	7	9	3	5	2						10						3						8						4						
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	<p>MAIN TEACHING – Function Machines. (10 minutes) Explain the concept of function machines: you start with a number at one end then you follow the instructions on the function machine to reach the result on the other end. Demonstrate the following number machines on the IWB and work through with your pupils to find the resulting number. Demonstrate the following number machines on paper and work through with your child to find the resulting number.</p> <div style="display: flex; align-items: center; margin-bottom: 20px;"> <div style="border: 1px solid black; padding: 5px; margin: 0 10px;">6</div> <div style="font-size: 2em; margin: 0 10px;">➡</div> <div style="border: 1px solid black; padding: 5px; margin: 0 10px;">+4</div> <div style="font-size: 2em; margin: 0 10px;">➡</div> <div style="border: 1px solid black; padding: 5px; margin: 0 10px;">10</div> </div> <div style="display: flex; align-items: center;"> <div style="border: 1px solid black; padding: 5px; margin: 0 10px;">6</div> <div style="font-size: 2em; margin: 0 10px;">➡</div> <div style="border: 1px solid black; padding: 5px; margin: 0 10px;">x2</div> <div style="font-size: 2em; margin: 0 10px;">➡</div> <div style="border: 1px solid black; padding: 5px; margin: 0 10px;">12</div> </div> <p>MAIN TASK – (20 minutes) Have your child work through section one of the worksheet to find the answers to the one-step function machines.</p> <p>Mini-Plenary: Demonstrate the following multi-step function machines on the IWB and work through with your child to find the resulting number.</p> <div style="display: flex; align-items: center; margin-bottom: 20px;"> <div style="border: 1px solid black; padding: 5px; margin: 0 10px;">5</div> <div style="font-size: 2em; margin: 0 10px;">➡</div> <div style="border: 1px solid black; padding: 5px; margin: 0 10px;">+2</div> <div style="font-size: 2em; margin: 0 10px;">➡</div> <div style="border: 1px solid black; padding: 5px; margin: 0 10px;">7</div> <div style="font-size: 2em; margin: 0 10px;">➡</div> <div style="border: 1px solid black; padding: 5px; margin: 0 10px;">x3</div> <div style="font-size: 2em; margin: 0 10px;">➡</div> <div style="border: 1px solid black; padding: 5px; margin: 0 10px;">21</div> </div> <div style="display: flex; align-items: center;"> <div style="border: 1px solid black; padding: 5px; margin: 0 10px;">3</div> <div style="font-size: 2em; margin: 0 10px;">➡</div> <div style="border: 1px solid black; padding: 5px; margin: 0 10px;">+3</div> <div style="font-size: 2em; margin: 0 10px;">➡</div> <div style="border: 1px solid black; padding: 5px; margin: 0 10px;">6</div> <div style="font-size: 2em; margin: 0 10px;">➡</div> <div style="border: 1px solid black; padding: 5px; margin: 0 10px;">x4</div> <div style="font-size: 2em; margin: 0 10px;">➡</div> <div style="border: 1px solid black; padding: 5px; margin: 0 10px;">24</div> </div> <p>Now have your child complete section 2 of the worksheet to find the answer to the multi-step function machines.</p>	<p>Traffic light expected lesson outcomes:</p> <ul style="list-style-type: none"> ✓ I can solve single step function machine problems. ✓ I can solve multi-step function. ✓ I can solve fraction multiplications efficiently using my knowledge of times tables.



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	<p>PLENARY – (15 minutes) The function machines below have had the labels come off showing the operation that has happened at the first or second step. Model to your child how you can solve these problems.</p> <div style="display: flex; align-items: center; margin-bottom: 10px;"> <div style="border: 1px solid black; padding: 5px; margin: 0 5px;">5</div> <div style="font-size: 2em; margin: 0 5px;">➡</div> <div style="border: 1px solid black; padding: 5px; margin: 0 5px;">+2</div> <div style="font-size: 2em; margin: 0 5px;">➡</div> <div style="border: 1px solid black; padding: 5px; margin: 0 5px; color: red;">7</div> <div style="font-size: 2em; margin: 0 5px;">➡</div> <div style="border: 1px solid black; padding: 5px; margin: 0 5px;">x3</div> <div style="font-size: 2em; margin: 0 5px;">➡</div> <div style="border: 1px solid black; padding: 5px; margin: 0 5px; color: red;">21</div> </div> <div style="display: flex; align-items: center;"> <div style="border: 1px solid black; padding: 5px; margin: 0 5px;">3</div> <div style="font-size: 2em; margin: 0 5px;">➡</div> <div style="border: 1px solid black; padding: 5px; margin: 0 5px;">+3</div> <div style="font-size: 2em; margin: 0 5px;">➡</div> <div style="border: 1px solid black; padding: 5px; margin: 0 5px; color: red;">6</div> <div style="font-size: 2em; margin: 0 5px;">➡</div> <div style="border: 1px solid black; padding: 5px; margin: 0 5px;">x4</div> <div style="font-size: 2em; margin: 0 5px;">➡</div> <div style="border: 1px solid black; padding: 5px; margin: 0 5px; color: red;">24</div> </div> <p>Ask your child/children to come up with similar questions to challenge their partners. At the end ask a the child/children to read out their examples to you, a family member or friend either in person or via a digital platform.</p>	<p>Traffic light expected lesson outcomes:</p> <ul style="list-style-type: none"> ✓ I can solve single step function machine problems. ✓ I can solve a multi-step function. ✓ I can solve fraction multiplications efficiently using my knowledge of times tables.



Reflection	Child's Progress