

<b>Class:</b> SS / HC / BL	<b>Term:</b> Spring 1	<b>Year Group:</b> 4
<b>Prime Learning Challenge</b>	How do some solids, liquids and gases change state? (States of Matter) How are rivers formed?	

<p><b>Past</b> What do pupils already know/understand? Do they have any misconceptions?</p>	<p><b>Present</b> What do pupils want to know/understand? What are they interested in? What motivates them?</p>	<p><b>Context</b> How is this challenge relevant to the needs of your children?</p>
<p>How do some solids, liquids and gases change state? Falls into the Science Programme of Study, 'States of Matter, as set out by the NC. The Progression Road Map below shows what prior knowledge children have learnt and where this unit fits into the Programme of Study.</p>	<p><b>Science -</b> How can we classify solids, liquids and gases? What do we mean by freezing and melting? How can you separate sand, salt and water? What is the Water Cycle? What do we mean by condensation and evaporation?</p> <p><b>Geography -</b> What are the main features of a river? What are the features of the upper, middle and lower courses of a river? Why have so many cities been created close to a river? How would you carry out a river study?</p>	<p><b>Science -</b> Pupils should be taught to:</p> <ul style="list-style-type: none"> <li>compare and group materials together, according to whether they are solids, liquids or gases</li> <li>observe that some materials change state when they are heated or cooled, and measure or research the temperature at which this happens in degrees Celsius (°C)</li> <li>identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature</li> </ul> <p><b>Geography -</b> Pupils should be taught to describe how a river is formed using the geographical vocabulary associated with rivers, including source mouth, estuary, meander, tributary. Pupils should be taught the difference between the upper, middle and lower courses of a river and be able to identify the features of each. Children will</p>

		investigate what erosion and deposition are in relation to rivers. Children will gain an understanding why many cities are situated next to a river.
By the end of this prime learning challenge...	<b>Some: More Able</b>	<p>Pupils should classify solids, liquids and gases and understand the concept of freezing and melting. They should be able to use scientific concepts to separate sand, salt and water and understand the water cycle including using the correct vocabulary e.g. condensation / evaporation.</p> <p>Pupils should know how a river is formed. Pupils should know the geographical vocabulary associated with rivers, including source, mouth, estuary, meander, tributary. Pupils should know the difference between the upper, middle and lower courses of a river. Pupils should know what erosion and deposition are in relation to rivers. Pupils should know why many cities are situated next to a river. Pupils should know how waterfalls are formed. Pupils should know what an oxbow lake is.</p>
	<b>Most: Core</b>	<p>Pupils should be able to describe solids, liquids and gases and understand the concept of freezing and melting. They should be able to use scientific concepts to separate sand, salt and water and understand the water cycle including using the correct vocabulary e.g. condensation / evaporation.</p> <p>Pupils should know how a river is formed. Pupils should know the geographical vocabulary associated with rivers, including source, mouth, estuary, meander, tributary. Pupils should know the difference between the upper, middle and lower courses of a river. Pupils should know what erosion and deposition are in relation to rivers. Pupils should know why many cities are situated next to a river.</p>
	<b>All: Less able</b>	<p>Pupils should begin to understand solids, liquids and gases and the concept of freezing and melting. They should be able to describe the basics of the water cycle.</p> <p>Pupils should begin to know how a river is formed. Pupils should begin to know the geographical vocabulary associated with rivers, including source, mouth, estuary, meander, tributary. Pupils should begin to explain why many cities are situated next to a river.</p>

Pre-Learning How will you make sure you are pitching appropriately?	Wow!	Reflection How will you reflect & evaluate?
<p>Children will complete a pre-learning assessment for science and geography.</p> <p>We will use the Focus curriculum document and the National Curriculum statutory requirements.</p> <p>We will also use children's questions as a guide for our planning and teaching.</p>	<p>Wow! – Geography – River Themed Artwork afternoon</p> <p>Hook – Science – Children will watch a few experiments taking place both in the classroom and on the Internet. Read the book 'A Drop Around The World.'</p>	<p>Children will complete the post-learning assessments.</p> <p>We will return to children's pre unit questions at the end of the topics.</p> <p>Children will complete a reflection task to reflect on their work and understanding created during the topic.</p>

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
<b>English</b>	The Princess' Blankets by Carol Ann Duffy Letter	The Princess' Blankets by Carol Ann Duffy Letter	The Princess' Blankets by Carol Ann Duffy Letter	A River by Marc Martin Recount	A River by Marc Martin Recount	Poetry
<b>Handwriting</b>	<b>Penpals Year 4</b> - Warm up clips / Units - Term 2 - Lesson 15 - Size, proportion and spacing - able, ful  10 Mins a Day	<b>Penpals Year 4</b> - Warm up clips / Units - Term 2 - Lesson 16 - Size, proportion and spacing - fs, ves  10 Mins a Day	<b>Penpals Year 4</b> - Warm up clips / Units - Term 2 - Lesson 17 - Speed and fluency - abbreviations for notes  10 Mins a Day	<b>Penpals Year 4</b> - Warm up clips / Units - Term 2 - Lesson 20 - Speed and fluency - Lists Part 1  10 Mins a Day	<b>Penpals Year 4</b> - Warm up clips  High Frequency Words  10 Mins a Day	<b>Penpals Year 4</b> - Warm up clips  High Frequency Words  10 Mins a Day
<b>Rainbow Grammar</b>	To be able to use fronted adverbials and	To be able to use fronted adverbials and	To be able to use fronted adverbials and	To be able to create expanded noun phrases	To be able to create expanded noun phrases	-

	conjunctions in Rainbow Grammar Sentences.	conjunctions in Rainbow Grammar Sentences.	conjunctions in Rainbow Grammar Sentences and include them in a letter.			
<b>Sounds Write</b>	Unit 19 - or	Unit 20 - air	Unit 21 - ue	Unit 23 - oy	Unit 24 - ar	Unit 25 - o
<b>NC Spelling Rules</b>	<p>Dropping the 'e' and adding a 'y'  <b>Rule:</b> Remove the 'e' and add 'y'.</p> <p><b>Examples:</b></p> <p><i>Bone</i> → <b>Bony</b></p> <p><i>Grease</i> → <b>Greas y</b></p> <p><i>Scale</i> → <b>Scaly</b></p>	<p>Adding -ing (Step 20 Yr 2) to words of one syllable</p> <p>(Edshed)</p>	<p>Adding -ed (Step 21 Yr 2) to words of one syllable</p> <p>(Edshed)</p>	<p>Words were 'si' and 's' make a zh sound (Step 28 Yr 2)</p> <p>(Edshed)</p>	<p>The suffixes -ment and -ness (Step 29 Yr 2)</p> <p>(Edshed)</p>	<p>The suffixes -ful, -less and -ly (Step 30 Yr 2)</p> <p>(Edshed)</p>
<b>Maths</b>	Multiplication and Division	Multiplication and Division	Multiplication and Division	Length and Perimeter	Length and Perimeter	Fractions
<b>Science</b>	Pre-learning Task / Hook	<b>Component 1</b> - <i>How can we classify solids, liquids and gases?</i>	<b>Component 2</b> - <i>What do we mean by freezing and melting?</i>	<b>Component 4</b> - <i>What is a water cycle?</i>  To understand the water cycle.	Investigation involving temperature	Post-Learning Task - Reflection Task

		To be able to classify solids, liquids and gases	To understand freezing and melting.	<b>Component 5 -</b> <i>What is meant by the terms: condensation, and evaporation?</i>  To understand condensation and evaporation.		
<b>History</b>						
<b>Geography</b>	<b>Pre-learning Task /</b> To understand the main features of a river.  <b>Component 1 -</b> <i>What are the main features of a river?</i>	<b>Wow</b> River Art	To understand the water cycle.  <b>Component 2 -</b> <i>What is the water cycle and why is it so important?</i>  (To be completed in Science - States of Matter - C4)	To understand the features of the upper, middle and lower courses of a river.  <b>Component 3 -</b> <i>What are the features of the upper, middle and lower courses of a river?</i>	To understand why cities been created close to a river.  <b>Component 4 -</b> <i>Why have so many cities been created close to a river?</i>	<i>To be able to carry out a river study.</i>  <b>Component 5 -</b> <i>How would you carry out a river study? (Linked with Reflection Task)</i>
<b>Music</b>	Charanga Stop! Recorders	Charanga Stop! Recorders	Charanga Stop! Recorders	Charanga Stop! Recorders	Charanga Stop! Recorders	Charanga Stop! Recorders
<b>PSHE</b>	<b>Jigsaw - Hopes and Dreams</b> To be able to identify my hopes and	<b>Jigsaw - Broken Dreams</b> To understand that sometimes hopes and	<b>Jigsaw - Overcoming Disappointment</b> To understand that reflecting	<b>Jigsaw - Creating New Dreams</b> To understand how to make a	<b>Jigsaw - Achieving Goals</b> To understand how to work out the steps to	<b>Jigsaw - We did it!</b> To be able to identify the contributions



