



All Mixed Up– Stage 1


Material World Strand


Term	1	2	3	4	Weeks	1	2	3	4	5	6	7	8	9	10	11
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Outcome	Lesson Sequence – Overview	Resources	Word Wall
<p>ST1-6MW-S identifies that materials can be changed or combined</p> <ul style="list-style-type: none"> explain and draw their ideas of how materials can be mixed together for different purposes identify mixtures in their everyday lives <p>ST1-7MW-T describes how the properties of materials determine their use</p> <ul style="list-style-type: none"> contribute to discussions about how people from different professions, including scientists, might use mixtures identify questions about mixtures and what they are used for <p>ST1-1WS-S observes, questions and collects data to communicate and compare ideas</p> <ul style="list-style-type: none"> record findings in a table and discuss their observations. 	<p>Lesson 1 <u>Masters of Mixing – Lesson focus p11</u></p> <ul style="list-style-type: none"> To capture students' interest and find out what they think they know about how different materials can be combined, including by mixing, for a particular purpose. To elicit students' questions about mixtures and their uses. <p>Session 1 What's my mixture?</p> <p><u>Students:</u></p> <ul style="list-style-type: none"> discuss similarities and differences between images of characters creating mixtures explain why they think different characters are creating mixtures brainstorm what they know about mixtures and their uses. <p>Session 2 Many mixtures</p> <p><u>Students:</u></p> <ul style="list-style-type: none"> observe, record and report on mixtures that they can see around their home. 	<p>Session 1</p> <p>For the class</p> <ul style="list-style-type: none"> class science journal word wall 1 enlarged copy of 'Mix masters' (Resource sheet 1) 1 enlarged copy of 'Looking in the bowl' (Resource sheet 2) samples of materials (see 'Preparation') 8 or more small ziplock bags or containers with lids 1 large sheet of paper (see 'Preparation') <p>For each student</p> <ul style="list-style-type: none"> science journal 1 copy of 'Looking in the bowl' (Resource sheet 2) <p>Session 2</p> <p>For the class</p> <ul style="list-style-type: none"> class science journal word wall 1 enlarged copy of 'Information note for families' (Resource sheet 3) 1 enlarged copy of 'My mixtures' (Resource sheet 4) <p>For each student</p> <ul style="list-style-type: none"> science journal 	<p>change</p> <p>chemical</p> <p>combining</p> <p>cooking</p> <p>cornflour</p> <p>gas</p> <p>journal</p> <p>liquid</p> <p>materials</p> <p>mixing</p> <p>mixtures</p> <p>natural</p> <p>observation</p> <p>procedure</p> <p>purpose</p>


		<ul style="list-style-type: none"> • 1 copy of 'Information note for families' (Resource sheet 3) • 1 copy of 'My mixtures' (Resource sheet 4) • 1 'My mixtures' folder (see 'Preparation') 	<i>science</i> <i>scientist</i> <i>separate</i>
<p>ST1-6MW-S identifies that materials can be changed or combined</p> <ul style="list-style-type: none"> • work in collaborative learning teams to complete a guided exploration of different mixtures of solids <p>ST1-7MW-T describes how the properties of materials determine their use</p> <ul style="list-style-type: none"> • describe different mixtures of solids and what they might be used for <p>ST1-1WS-S observes, questions and collects data to communicate and compare ideas</p> <ul style="list-style-type: none"> • record observations using an annotated drawing in a table • discuss and compare observations. 	<p>Lesson 2 <u>Creative cooking – Lesson focus p25</u></p> <ul style="list-style-type: none"> • To provide hands-on, shared experiences of creating mixtures of solids. <p>Students:</p> <ul style="list-style-type: none"> • <i>work in teams to observe different materials being mixed together</i> • <i>record their observations in a table and discuss them.</i> 	<p>For the class</p> <ul style="list-style-type: none"> • class science journal • word wall • team skills chart • team roles chart • 1 enlarged copy of 'Crazy cooking' (Resource sheet 5) <p>For each team</p> <ul style="list-style-type: none"> • each team member's science journal • role wristbands or badges for Manager and Speaker • 1 copy of 'Crazy cooking' (Resource sheet 5) • 3 cups • 1 tablespoon • 3 tablespoons icing sugar • 2 tablespoons cocoa powder • 2 tablespoons puffed rice • protective covering for work areas (see 'Preparation') • 1 magnifying glass 	<i>solid</i> <i>synthetic</i> <i>tools</i>

<p>ST1-6MW-S identifies that materials can be changed or combined</p> <ul style="list-style-type: none"> identify that the properties of a mixture can depend on the relative amounts of substances it contains <p>ST1-1WS-S observes, questions and collects data to communicate and compare ideas</p> <ul style="list-style-type: none"> work in collaborative learning teams to follow a procedural text for making a mixture of solids and liquids record their observations using annotated drawings discuss and compare observations. 	<h3>Lesson 3</h3> <p><u>Sometimes Slimy – Lesson focus p31</u></p> <ul style="list-style-type: none"> To provide hands-on, shared experiences of creating mixtures of solids and liquids. <p><u>Students:</u></p> <ul style="list-style-type: none"> <i>work in teams to explore what happens when cornflour is mixed with water</i> <i>discuss and compare their observations</i> <i>identify that the properties of mixtures can depend on the quantities of materials used</i> 	<p>For the class</p> <ul style="list-style-type: none"> class science journal word wall team skills chart team roles chart 1 enlarged copy of 'Just add water' (Resource sheet 6) extra water <i>Optional:</i> coloured cornflour slime (see 'Preparation') <p>For each team</p> <ul style="list-style-type: none"> each team member's science journal role wristbands or badges for Manager and Speaker 1 copy of 'Just add water' (Resource sheet 6) 1 tablespoon ½ cup water in a cup ¼ cup cornflour 1 mixing bowl 1 mixing spoon extra ½ cup water protective covering for work areas (see 'Preparation') 	
<p>ST1-6MW-S identifies that materials can be changed or combined</p> <ul style="list-style-type: none"> identify that not everything can mix together <p>ST1-7MW-T describes how the properties of</p>	<h3>Lesson 4</h3> <p><u>Fun Fluids – Lesson focus p37</u></p> <ul style="list-style-type: none"> To provide hands-on, shared experiences of creating mixtures of liquids. <p><u>Students:</u></p> <ul style="list-style-type: none"> <i>work as a class to investigate what happens when oil, water and detergent are mixed together</i> <i>discuss their recorded observations and make evidence-based claims.</i> 	<p>For the class</p> <ul style="list-style-type: none"> class science journal word wall 1 enlarged copy of 'Slick oil' (Resource sheet 7) 1 cup vegetable oil 1 cup water 3 tablespoons dishwashing detergent 4 cups 4 mixing spoons or pop sticks 	

<p>materials determine their use</p> <ul style="list-style-type: none"> identify ways in which scientists work, including refining mixtures for everyday purposes. <p>ST1-1WS-S observes, questions and collects data to communicate and compare ideas</p> <ul style="list-style-type: none"> predict what will happen when different substances are mixed together work as a class to follow a procedural text for making a mixture of liquids record their observations using labelled drawings discuss and compare observations 		<ul style="list-style-type: none"> measuring cup with $\frac{1}{4}$ marked on it protective covering for work area <p>For each student</p> <ul style="list-style-type: none"> each student's science journal 1 copy of 'Slick oil' (Resource sheet 7) 	
<p>ST1-6MW-S identifies that materials can be changed or combined</p> <ul style="list-style-type: none"> observe and compare the different mixtures and their purposes <p>ST1-7MW-T describes how the properties of materials determine their use</p>	<p>Lesson 5 <u>Marvellous Mixtures – Lesson focus p42</u></p> <ul style="list-style-type: none"> To support students to represent and explain their understanding of how different materials can be mixed together for different purposes, and to introduce current scientific views. <p><u>Students:</u></p> <ul style="list-style-type: none"> <i>discuss mixtures they have explored and the purposes of the mixtures</i> <i>sort mixtures according to their purposes using a T-chart</i> <i>describe what the term 'mixture' means.</i> 	<p>For the class</p> <ul style="list-style-type: none"> word wall class science journal students' mixtures from home (see 'Preparation') 1 enlarged T-chart 6 pieces of A5 paper <i>Optional:</i> research materials <p>For each student</p> <ul style="list-style-type: none"> science journal 	

<ul style="list-style-type: none"> identify what a mixture is and what it can be used for <p>ST1-1WS-S observes, questions and collects data to communicate and compare ideas</p> <ul style="list-style-type: none"> present their findings about mixtures in their homes and discuss with the class listen to and follow a set of rules to create a T-chart to represent what they know about their mixtures. 			
<p>ST1-6MW-S identifies that materials can be changed or combined</p> <ul style="list-style-type: none"> respond to and pose questions about how a mixture can be separated <p>ST1-1WS-S observes, questions and collects data to communicate and compare ideas</p> <ul style="list-style-type: none"> predict whether ingredients can be separated from a mixture using different techniques complete a guided investigation 	<p>Lesson 6 <u>Sifting Solids – Lesson focus p46</u></p> <ul style="list-style-type: none"> To support students to plan and conduct an investigation of how to separate a mixture of solids. <p>Session 1 Cook’s dilemma</p> <p><u>Students:</u></p> <ul style="list-style-type: none"> <i>make predictions about how mixtures can be separated</i> <i>investigate what mixtures can be separated using different tools.</i> <p>Session 2 Can we sift it?</p> <p><u>Students:</u></p> <ul style="list-style-type: none"> <i>represent the results of their investigation through a game</i> <i>make evidence-based claims about separating mixtures.</i> 	<p>Session 1 For the class</p> <ul style="list-style-type: none"> class science journal word wall 1 enlarged copy of ‘Sifting investigation results’ (Resource sheet 8) tablespoons icing sugar 3 tablespoons cocoa 3 tablespoons coconut 3 tablespoons puffed rice 3 large bowls 1 mixing spoon protective covering for work areas 1 colander 1 sieve paper towel 1 jar 	

<ul style="list-style-type: none"> record their observations using a table with annotated drawings through discussion and a game, compare observations with others discuss future questions for investigation. 		<p>For each student</p> <ul style="list-style-type: none"> each team member's science journal 1 copy of 'Sifting investigation results' (Resource sheet 8) <p>Session 2</p> <p>For the class</p> <ul style="list-style-type: none"> class science journal word wall ½ cup icing sugar in clear plastic container or bag ½ cup coconut in clear plastic container or bag ½ cup cocoa powder in clear plastic container or bag ½ cup puffed rice in clear plastic container or bag 'Sifting game labels' (Resource sheet 9) (see 'Preparation') clothes pegs (see 'Preparation') 1 colander 1 sieve 1 piece of paper towel <p>For each team</p> <ul style="list-style-type: none"> role wristbands or badges for Manager and Speaker completed copy of 'Sifting investigation results' (Resource sheet 8) 	
<p>ST1-6MW-S identifies that materials can be changed or combined</p> <ul style="list-style-type: none"> respond to and pose questions about how a mixture of liquids can be separated <p>ST1-1WS-S</p>	<p>Lesson 7</p> <p><u>Interesting Ink – Lesson focus p56</u></p> <ul style="list-style-type: none"> To support students to plan and conduct an investigation of what different black inks are made of. <p>Students:</p> <ul style="list-style-type: none"> <i>make predictions about how black inks can be separated</i> <i>work in teams to investigate what different black inks are made of.</i> 	<p>For the class</p> <ul style="list-style-type: none"> class science journal word wall team skills chart team roles chart 1 enlarged copy of 'Travelling ink' (Resource sheet 10) self-adhesive note 	

<p>observes, questions and collects data to communicate and compare ideas</p> <ul style="list-style-type: none"> • predict what black ink is made of • work in collaborative learning teams to complete a guided investigation • through discussion, compare observations with others and with their predictions • discuss future questions for investigation. 		<p>For each team</p> <ul style="list-style-type: none"> • role wristbands or badges for Manager and Speaker • each team member's science journal • 1 copy of 'Travelling ink' (Resource sheet 10) • 1 blank piece of A4 paper • 1 cup • 2 strips of filter paper (see 'Preparation') • 2 different pens with soluble black ink (see 'Preparation') • protective covering for work area (see 'Preparation') • water 	
<p>ST1-6MW-S identifies that materials can be changed or combined participate in a class discussion about mixtures and contribute ideas for an ideas map</p> <p>ST1-1WS-S observes, questions and collects data to communicate and compare ideas</p> <ul style="list-style-type: none"> • create a page for a class book using appropriate sentence structures • express their thoughts about their learning journey. 	<p>Lesson 8 <u>Musing on Mixtures – Lesson focus p62</u></p> <ul style="list-style-type: none"> • To provide opportunities for students to represent what they know about how different materials can be combined, including by mixing, for a particular purpose, and to reflect on their learning during the unit. <p><u>Students:</u></p> <ul style="list-style-type: none"> • <i>brainstorm a new ideas map about mixtures</i> • <i>complete a page about a mixture for a class book.</i> 	<p>For the class</p> <ul style="list-style-type: none"> • class science journal • word wall • A4 folder (see 'Preparation') • 1 enlarged copy of 'Mixed up' (Resource sheet 11) <p>For each student</p> <ul style="list-style-type: none"> • each student's science journal • 1 copy of 'Mixed up' (Resource sheet 11) 	

