



## Y4 Medium Term Plan Autumn 2

	<b><u>Science</u></b>	<b><u>Humanities</u></b>	<b><u>RE</u></b>	<b>Computing</b>
<b>Theme</b>	<p><b>Theme: states of matter continued</b></p> <p><b>Key skills:</b> asking relevant questions and using different types of scientific enquiries to answer them</p> <p>setting up simple practical enquiries, comparative and fair tests</p> <p>making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers</p> <p>gathering, recording, classifying and presenting data in a variety of ways to help in answering questions</p> <p>recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables</p> <p>reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions</p> <p>using results to draw simple conclusions, make predictions for new values, suggest improvements and</p>	<p><b>Theme: Rivers and the water cycle</b></p> <p><b>Key skills</b></p> <ul style="list-style-type: none"> <li>•Use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied</li> <li>•Use the eight points of a compass, four figure grid references, symbols and key (including the use of Ordnance Survey maps) to build their knowledge of the United Kingdom and the wider world</li> <li>•Use fieldwork to observe, measure, record and present the human and physical features in the local area using a range of methods</li> </ul> <p><b>Key knowledge</b></p> <ul style="list-style-type: none"> <li>•Locate the world's countries, using maps to focus on Europe (including the location of Russia) and North and South America, concentrating on their environmental regions, key physical and human characteristics, countries, and major cities</li> </ul> <p>Describe and understand key aspects of:</p> <ul style="list-style-type: none"> <li>-Physical geography, including rivers and the water cycle and</li> </ul>	<p><b>Theme: Christianity</b></p> <p><b>**key question: What is the most significant part of the Nativity story for Christians today?*</b></p> <p><b>Key skills:</b> Interpretation Empathy Investigation Application Analysis Evaluation Expression Reflection</p> <p><b>Key knowledge:</b></p> <p>To understand that a symbol is a picture that stands for something else.</p> <p>To know the difference between a religious and commercial christmas symbol Religious: star or candle, for the star of Bethlehem; a fir tree, to represent everlasting life; wreath, a symbol of neverending life; bell, everyone is previous in the eyes of the Lord; a gift with a bow, A ribbon is tied around a gift to represent how people should all be tied together in bonds of unity and goodwill during the holiday season; a candy cane, to represent the shepherd's crook. Other symbols are: angels, poinsettias, the nativity scene,</p>	<p><b>Unit 4.9 Making Music AND Unit 4.6 Animations</b></p> <p>Key Skills;</p> <ul style="list-style-type: none"> <li>• To identify and discuss the main elements of music</li> </ul> <ul style="list-style-type: none"> <li>o Pulse</li> <li>o Rhythm</li> <li>o Tempo</li> <li>o Pitch</li> <li>o Texture <ul style="list-style-type: none"> <li>• Create a simple animation on a program</li> <li>• To edit an animation by adding backgrounds and onion skinning</li> </ul> </li> </ul> <p>Key Knowledge:</p> <ul style="list-style-type: none"> <li>• Know what melody is (sequence of single notes)</li> <li>• Know what pitch is (highness or lowness of sound)</li> <li>• Understand how music is created</li> <li>• To know what an animation is (a sequence of pictures moving in a frame)</li> <li>• To know what onion skinning is in animation (to see multiple frames at once in order to edit)</li> </ul>

	<p>raise further questions</p> <p>identifying differences, similarities or changes related to simple scientific ideas and processes</p> <p>using straightforward scientific evidence to answer questions or to support their findings.</p> <p><b>Key Knowledge:</b></p> <p>compare and group materials together, according to whether they are solids, liquids or gases</p> <p>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)</p> <p>identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature.</p>	<p>-human geography, including: types of settlement and land use, and the distribution of natural resources including energy, food, minerals and water</p> <p>Heat from the Sun causes water on Earth (in oceans, lakes etc) to evaporate (turn from liquid into gas) and rise into the sky. This water vapor collects in the sky in the form of clouds. Condensation: As water vapor in the clouds cools down it becomes water again, this process is called condensation</p> <p>It is called a cycle because the water keeps going round and eventually gets reused.</p> <p>To know there are different types of clouds:  <b>Stratus/strato</b> - flat or layered, smooth  <b>Cumulus/cumulo</b> - heaped up and puffy, like a cauliflower  <b>Cirrus/cirro</b> - high up, wispy  <b>Alto</b> - medium level  <b>Nimbus/nimbo</b> - rain-bearing</p> <p>Water purification. Water from rivers, lakes and the sea has to be treated to make it safe to use and drink. Different methods are used to do this, such as sedimentation, filtration and chlorination. Learn also about the processes of fluoridation, desalination and distillation.</p> <p>To know that water pollution is : Discharge of domestic and industrial effluent wastes, leakage from water tanks, marine dumping, radioactive waste and atmospheric deposition are major causes of water pollution. Heavy metals that disposed off and industrial waste can accumulate in lakes and river, proving harmful to humans and animals</p> <p>Unsafe water kills more people each year than war and all other forms of violence combined.</p> <p>Meanwhile, our drinkable water sources are finite: Less than 1 percent of the earth's freshwater is actually accessible to us.</p>	<p>Jesus, a christingle  Commercial: Santa Claus, bauble, christmas cards, christmas dinner, crackers, mulled wine, reindeers.</p> <p>To recognise the important symbols in the christmas story:  The angel symbolises that Jesus was not just an ordinary man. Angels are not an everyday occurrence and were there to show people that Jesus was a special gift from God. The Incarnation of God.  The star guided the wise men just as Jesus is the light that guides people to God.  The wise men and the Shepherds are an interesting contrast between rich and poor, symbolising that Jesus is a gift from God to everyone.  The gifts from the wise men: gold is a precious metal symbolising how precious Jesus is and represents his Kingship. Frankincense is used in perfume and incense and represents Jesus' priestly role. Myrrh is also used in perfumes and incense and in Jesus' day was an embalming ointment which symbolises his death.  The manger and stable were humble beginnings for a 'King'.  The stable continues to represent humble beginnings as there was no room for Jesus which runs parallel to people not finding room in their lives for God.</p> <p>To understand the conception of incarnation: a person who embodies in the flesh a deity, spirit or quality.</p> <p>To know that a Christingle, for Christians, represents "christ's light" and each part has its own meaning. The orange represents the world, the candle is to remind us of Jesus as Christians believe Jesus is the light of the world. The red ribbon goes all around the 'world' and reminds Christians that Jesus died because it symbolises His blood. The four cocktail sticks have two meanings; the four seasons or the four corners of the world and the sweets or dried fruit symbolise God's gifts to the world including kindness and love.</p>	
<p><b>Week 1</b></p>	<p><b>S.K.L.O:</b> To deepen my understanding of gases around us</p>	<p><b>L.O: To locate capital cities and countries within the continents of Europe, North and South America</b></p>	<p><b>**engagement lesson**</b></p> <p><b>L.O: To recognise and understand</b></p>	<p>Unit 4.9</p> <p>LO: To explore different elements of</p>

	<p><b>W.S.L.O:</b> To use results to draw simple conclusions</p> <p><i>**in this lesson, the children get to delve deeper into what a gas actually is. I have linked the various activities and website below- I feel could be done in one double lesson (the smelling one could be with only a couple children finding it, and the rest watching)</i></p> <p><a href="https://hamiltontrust-live-b211b12a2ca14cbb94d6-36f68d2.divio-media.net/documents/LKS2_Science_Yr_4_Autumn2_States_of_matter_Session_2_Resource.pdf">https://hamiltontrust-live-b211b12a2ca14cbb94d6-36f68d2.divio-media.net/documents/LKS2_Science_Yr_4_Autumn2_States_of_matter_Session_2_Resource.pdf</a></p> <p><a href="https://www.hamilton-trust.org.uk/science/year-4-science/states-matter-states-matter-scientists/">https://www.hamilton-trust.org.uk/science/year-4-science/states-matter-states-matter-scientists/</a></p> <p><i>^^Lesson 2 "it's a bit gassy" will give you the resources needed</i></p> <p><b>Key skills:</b> asking relevant questions and using different types of scientific enquiries to answer them</p> <p>making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers</p> <p>gathering, recording, classifying and presenting data in a variety of ways to help in answering questions</p> <p>recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables</p> <p>reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and</p>	<p><i>**children to have an outline of a part of Europe or North America (higher children can have South America, larger area of Europe or less well known countries to place in a full outline of a continent) and to use map and atlases to dissect the continent into its countries, and then to pinpoint their capital cities.**</i></p> <p><b>Key skills</b></p> <ul style="list-style-type: none"> <li>•Use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied</li> </ul> <p><b>Key knowledge</b></p> <ul style="list-style-type: none"> <li>•Locate the world's countries, using maps to focus on Europe (including the location of Russia) and North and South America, concentrating on their environmental regions, key physical and human characteristics, countries, and major cities</li> </ul> <p>Countries in Europe:</p> <ul style="list-style-type: none"> <li>Albania, Andorra, Armenia, Austria, Azerbaijan</li> <li>Belarus, Belgium</li> <li>Bosnia and Herzegovina</li> <li>Bulgaria, Croatia, Cyprus, Czechia, Denmark</li> <li>Estonia, Finland, France</li> <li>Georgia, Germany, Greece</li> <li>Hungary, Iceland, Ireland, Italy</li> <li>Kazakhstan, Kosovo</li> <li>Latvia, Liechtenstein</li> <li>Lithuania, Luxembourg</li> <li>Malta, Moldova, Monaco, Montenegro, Netherlands, North Macedonia (formerly Macedonia)</li> <li>Norway, Poland, Portugal</li> <li>Romania, Russia, San Marino, Serbia, Slovakia, Slovenia, Spain, Sweden</li> <li>Switzerland, Turkey, Ukraine, United</li> </ul>	<p><b>the importance of symbols</b></p> <p><b>**key question: What is the most significant part of the Nativity story for Christians today?*</b></p> <p><b>Key skills:</b> Interpretation- interpret different symbols that they come across in everyday life. Empathy- understand that some symbols that they know are used, other children may not have the same feelings towards, or may not know them.</p> <p><b>Key knowledge:</b> Some symbols are cultural and so may not be recognised world wide. To understand that a symbol is a picture that stands for something else.</p>	<p>music</p> <p>Key Skills:</p> <ul style="list-style-type: none"> <li>• To identify and discuss the main elements of music</li> </ul> <ul style="list-style-type: none"> <li>o Pulse</li> <li>o Rhythm</li> <li>o Tempo</li> <li>o Pitch</li> <li>o Texture</li> </ul> <p>Key Knowledge:</p> <ul style="list-style-type: none"> <li>• Pupils can explain how a piece of music makes them feel.</li> </ul>
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	<p>conclusions</p> <p>using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions</p> <p>identifying differences, similarities or changes related to simple scientific ideas and processes</p> <p>using straightforward scientific evidence to answer questions or to support their findings.</p> <p><b>Key Knowledge:</b></p> <p>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)</p> <p>To know that gases are all around us. Even though something may look empty, it is actually full of gas</p> <p>Gas does weigh something, a balloon will get heavier when it is inflated.</p>	<p>Kingdom (UK), Vatican City</p> <p>Countries in North America:</p> <p>US, Canada, Greenland, Mexico, Cuba, Panama, Jamaica, Haiti, Costa Rica, Guatemala, Puerto Rico, The Bahamas, Dominican Republic, Belize, Nicaragua, El Salvador, Barbados, Dominica, Honduras, Saint Martin, Saint Kitts and Nevis, Grenada, U.S Virgin Islands, Saint pierre and Miquelon, Turks and Caicos, Cayman islands, Guadeloupe, Antigua and Barbuda, Martinique, Saint Lucia, Saint Bathelemy, British Virgin Islands, Anguilla, Saint Vincent and the Grenadines, Montserrat</p> <p>Countries in South America:</p> <p>Brazil, Argentina, Colombia, Peru, Chile, Ecuador, Bolivia, Venezuela, Guyana, Uruguay, Suriname, Paraguay, French Guiana, Trinidad and Tobago, Aruba, Curacao and Caribbean Netherlands.</p>		
<p><b>Week 2</b></p>	<p><b>K.L.O:</b> To investigate whether all solidified liquids take the same amount of time to return to liquid form</p> <p><b>W.S.L.O:</b> To make careful observations and measurements</p> <p><i>**have three solidified liquids- ice, chocolate (that has been melted first), and yogurt (that has been frozen into an ice cube. Children to then observe how long it takes for them to melt back into liquid form and then investigate and conclude through particle</i></p>	<p><b>L.O: To understand and describe the water cycle</b></p> <p><i>**link in this lesson to evaporation and condensation from Science too**</i></p> <p><b>Key skills</b></p> <p>•Use fieldwork to observe, measure, <b>record</b> and present the human and physical features in the local area using a range of methods</p>	<p><b>**investigation lesson**</b></p> <p><b>L.O: To begin to look at religious and commercial symbols of Christmas</b></p> <p><b>**key question: What is the most significant part of the Nativity story for Christians today?*</b></p> <p><i>Discuss different symbols of Christmas. Begin to sort them into religious and commercial (what they think).</i></p>	<p>LO: To experiment with rhythm and tempo</p> <p>Key Skills:</p> <ul style="list-style-type: none"> <li>• Pupils can identify and recall a simple rhythm.</li> <li>• Pupils can create their own simple rhythm using Busy Beats.</li> </ul> <p>Key Knowledge:</p> <ul style="list-style-type: none"> <li>• Pupils can explain what tempo is and how changing it can change the mood of a piece of music.</li> </ul>

	<p><i>knowledge why one took longer/quicker than another**</i></p> <p><b>Key skills:</b></p> <p>making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers</p> <p>gathering, recording, classifying and presenting data in a variety of ways to help in answering questions</p> <p>recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables</p> <p>reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions</p> <p>using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions</p> <p>identifying differences, similarities or changes related to simple scientific ideas and processes</p> <p><b>Key Knowledge:</b></p> <p>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)</p>	<p><b>Key knowledge</b></p> <p>Describe and understand key aspects of:</p> <p>-Physical geography, including rivers and the <b>water cycle</b> and</p> <p>Heat from the Sun causes water on Earth (in oceans, lakes etc) to evaporate (turn from liquid into gas) and rise into the sky. This water vapor collects in the sky in the form of clouds. Condensation: As water vapor in the clouds cools down it becomes water again, this process is called condensation</p> <p>It is called a cycle because the water keeps going round and eventually gets reused.</p>	<p><i>Read the Christmas story and then see which symbols are religious and used in the story. Were there any you missed? Children can then put these into their book in a table of religious and non-religious symbols.</i></p> <p><b>Key skills:</b></p> <p>Investigation- investigating different symbols. Investigating the difference between religious and commercial symbols.</p> <p>Application- applying knowledge known and learnt about Christianity</p> <p><b>Key knowledge:</b></p> <p>To know the difference between a religious and commercial christmas symbol</p>	
<p><b>Week 3</b></p>	<p><b>S.K.L.O:</b> To investigate how the amount of citric acid affects the rate of reaction</p>	<p><b>LO: To explain how clouds and rain are formed</b></p>	<p><b>**investigation lesson**</b></p> <p><b>L.O: To investigate the meaning of</b></p>	<p>LO: To explore melody and pitch</p> <p>Key Skills:</p>

	<p><b>W.S.L.O:</b> To make careful observations and measurements</p> <p><b>**A few ingredients in these bath bombs create a fizzy reaction: baking soda, citric acid, and bath water. When the two dry ingredients, baking soda and citric acid, hit the bath water, they react and create carbon dioxide bubbles. The bigger your bath bomb, the longer this reaction will last.**</b></p> <p><b>Key skills:</b> asking relevant questions and using different types of scientific enquiries to answer them</p> <p>setting up simple practical enquiries, comparative and fair tests</p> <p>making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers</p> <p>gathering, recording, classifying and presenting data in a variety of ways to help in answering questions</p> <p>recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables</p> <p>reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions</p> <p>using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions</p> <p>identifying differences, similarities or changes related to simple scientific ideas and processes</p>	<p><b>Key skills</b></p> <ul style="list-style-type: none"> <li>•Use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied</li> <li>•Use the eight points of a compass, four figure grid references, symbols and key (including the use of Ordnance Survey maps) to build their knowledge of the United Kingdom and the wider world</li> <li>•Use fieldwork to observe, measure, record and present the human and physical features in the local area using a range of methods</li> </ul> <p><b>Key knowledge</b></p> <ul style="list-style-type: none"> <li>•Locate the world's countries, using maps to focus on Europe (including the location of Russia) and North and South America, concentrating on their environmental regions, key physical and human characteristics, countries, and major cities</li> </ul> <p>Describe and understand key aspects of:</p> <ul style="list-style-type: none"> <li>-Physical geography, including rivers and the water cycle</li> </ul> <p>Clouds are created when water vapor, an invisible gas, turns into liquid water droplets. These water droplets form on tiny particles, like dust, that are floating in the air. That means some of the liquid water in the towel or bowl changed into an invisible gas called water vapor and drifted away into the atmosphere.</p> <p>To know there are different types of clouds:  <b>Stratus/strato</b> - flat or layered, smooth  <b>Cumulus/cumulo</b> - heaped up and</p>	<p><b>different symbols</b></p> <p><b>**key question: What is the most significant part of the Nativity story for Christians today?*</b></p> <p><i>Go back through the religious symbols of Christianity in the Christmas story and research what they mean and symbolise.</i></p> <p><b>Key skills:</b>  Interpretation- interpret the meaning of different symbols  Investigation- investigating the meaning of different symbols</p> <p><b>Key knowledge:</b></p> <p>To know the difference between a religious and commercial christmas symbol</p> <p>To recognise the important symbols in the christmas story:  The angel symbolises that Jesus was not just an ordinary man. Angels are not an everyday occurrence and were there to show people that Jesus was a special gift from God. The Incarnation of God. The star guided the wise men just as Jesus is the light that guides people to God.  The wise men and the Shepherds are an interesting contrast between rich and poor, symbolising that Jesus is a gift from God to everyone.  The gifts from the wise men: gold is a precious metal symbolising how precious Jesus is and represents his Kingship.  Frankincense is used in perfume and incense and represents Jesus' priestly role. Myrrh is also used in perfumes and incense  and in Jesus' day was an embalming</p>	<ul style="list-style-type: none"> <li>• To create a melodic phrase.</li> <li>• Pupils can use a variety of notes, experimenting with pitch.</li> </ul> <p>Key Knowledge:</p> <ul style="list-style-type: none"> <li>• Know what melody is (sequence of single notes)</li> <li>• Know what pitch is (highness or lowness of sound)</li> </ul>
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	<p>using straightforward scientific evidence to answer questions or to support their findings.</p> <p><b>Key Knowledge:</b></p> <p>compare and group materials together, according to whether they are solids, liquids or gases</p> <p>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)</p> <p>A few ingredients in these bath bombs create a fizzy reaction: baking soda, citric acid, and bath water. When the two dry ingredients, baking soda and citric acid, hit the bath water, they react and create carbon dioxide bubbles. The bigger your bath bomb, the longer this reaction will last.</p>	<p>puffy, like a cauliflower  <b>Cirrus/cirro</b> - high up, wispy  <b>Alto</b> - medium level  <b>Nimbus/nimbo</b> - rain-bearing</p>	<p>ointment which symbolises his death. The manger and stable were humble beginnings for a 'King'. The stable continues to represent humble beginnings as there was no room for Jesus which runs parallel to people not finding room in their lives for God.</p> <p>To understand the conception of incarnation: a person who embodies in the flesh a deity, spirit or quality.</p>	
<p><b>Week 4</b></p>	<p><b>S.K.L.O:</b> To investigate the relationship between temperature and pressure</p> <p><b>W.S.L.O:</b> To make systematic observations</p> <p><b>**As the flame burns inside the bottle, it heats up the air around it, causing it to expand. If you see your egg vibrating slightly, this is because air is escaping from the bottle. When the flame goes out, the air in the bottle cools and shrinks. This is what sucks the egg into the bottle!**</b></p> <p><a href="https://www.homesciencetools.com/article/egg-in-bottle-project/">https://www.homesciencetools.com/article/egg-in-bottle-project/</a></p>	<p><b>LO: To understand how water can be treated and made clean</b></p> <p><b>Key skills</b></p> <ul style="list-style-type: none"> <li>• Use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied</li> <li>• Use the eight points of a compass, four figure grid references, symbols and key (including the use of Ordnance Survey maps) to build their knowledge of the United Kingdom and the wider world</li> <li>• Use fieldwork to observe, measure, record and present the human and physical features in the local area</li> </ul>	<p><b>**investigation lesson**</b></p> <p><b>L.O: To create a symbol of Christmas</b></p> <p><b>**key question: What is the most significant part of the Nativity story for Christians today?*</b></p> <p><i>Children to make their own Christingle and to look at what all the aspects symbolise about Christmas</i></p> <p><i>Qu to ask: Is there any part of your Christingle that represents a part of the original nativity story?</i></p> <p><b>Key skills:</b></p>	<p>LO: To compose a piece of music.</p> <p>Key Skills:</p> <ul style="list-style-type: none"> <li>• Pupils can experiment with pitch, rhythm, and melody to create a piece of house music on Busy Beats.</li> </ul> <p>Key Knowledge:</p> <ul style="list-style-type: none"> <li>• Understand how music is created</li> </ul>

<p><b>Key skills:</b>  asking relevant questions and using different types of scientific enquiries to answer them</p> <p>setting up simple practical enquiries, comparative and fair tests</p> <p>making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers</p> <p>gathering, recording, classifying and presenting data in a variety of ways to help in answering questions</p> <p>recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables</p> <p>reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions</p> <p>using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions</p> <p>identifying differences, similarities or changes related to simple scientific ideas and processes</p> <p>using straightforward scientific evidence to answer questions or to support their findings.</p> <p><b>Key Knowledge:</b></p> <p>compare and group materials together, according to whether they are solids, liquids or gases</p> <p>observe that some materials change state when they are heated or cooled,</p>	<p>using a range of methods</p> <p><b>Key knowledge</b></p> <p>Water purification. Water from rivers, lakes and the sea has to be treated to make it safe to use and drink. Different methods are used to do this, such as sedimentation, filtration and chlorination. Learn also about the processes of fluoridation, desalination and distillation.</p> <p>Fluoridation- Water fluoridation is the controlled adjustment of fluoride to a public water supply to reduce tooth decay. Fluoridated water contains fluoride at a level that is effective for preventing cavities; this can occur naturally or by adding fluoride.</p> <p>Desalination- Desalination is a process that takes away mineral components from saline water. More generally, desalination refers to the removal of salts and minerals from a target substance, as in soil desalination, which is an issue for agriculture.</p> <p>Distillation- the action of purifying a liquid by a process of heating and cooling.</p>	<p>Interpretation- interpreting the different sections of the Christingle and what they think it represents  Investigation- investigating what each section actually mean and represent  Application- applying their prior knowledge of symbols</p> <p><b>Key knowledge:</b>  To know that a Christingle, for Christians, represents "christ's light" and each part has its own meaning. The orange represents the world, the candle is to remind us of Jesus as Christians believe Jesus is the light of the world. The red ribbon goes all around the 'world' and reminds Christians that Jesus died because it symbolises His blood. The four cocktail sticks have two meanings; the four seasons or the four corners of the world and the sweets or dried fruit symbolise God's gifts to the world including kindness and love.</p>	
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	<p>and measure or research the temperature at which this happens in degrees Celsius (°C)</p> <p>identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature.</p>			
<p><b>Week 5</b></p>	<p><b>S.K.L.O:</b> To investigate whether all metal melt at the same temperature</p> <p><b>W.S.L.O:</b> To use a table and bar chart</p> <p><a href="https://www.outstandingscience.co.uk/index.php?action=view_page&amp;page=view_unit&amp;unit=4c">https://www.outstandingscience.co.uk/index.php?action=view_page&amp;page=view_unit&amp;unit=4c</a></p> <p>Lesson linked above. Lesson 1 "research melting points"</p> <p>Resources linked below file:///C:/Users/Teacher/Downloads/Researching_Melting_Points.pdf</p> <p><i>Children can hypothesis first whether they agree or disagree (using prior knowledge too) and then find out! Children will each have different parts of the information needed, and will need to try and gain information from other children in order to fill in their table. They then can plot the information on a bar chart.</i></p> <p><b>Key skills:</b></p> <p>recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables</p> <p>using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions</p> <p>identifying differences, similarities or changes related to simple scientific</p>	<p><b>LO: To explain the cause and effects of flooding</b></p> <p><b>Key skills</b></p> <ul style="list-style-type: none"> <li>•Use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied</li> <li>•Use fieldwork to observe, measure, record and present the human and physical features in the local area using a range of methods</li> </ul> <p><b>Key knowledge</b></p> <p>Four main types of flooding: Fluvial =Caused by rivers bursting their banks. Pluvial= Caused by rainwater. Coastal= Caused by high tides and storms. Plumbing= Broken pipes in houses and other properties</p> <p>Fluvial (river flooding) and pluvial (rainwater) flooding are a direct result of the water system.</p> <p>Pluvial flooding happens when very heavy rain fall cannot drain away quickly enough. Fluvial flooding happens when a lot of rainwater falls over a period of time causing rivers to burst their banks.</p>	<p><b>**expression lesson**</b></p> <p><b>L.O: To design your own Christmas decoration</b></p> <p><b>**key question: What is the most significant part of the Nativity story for Christians today?*</b></p> <p><b>Key skills:</b> Application- applying the knowledge they have learnt to create their own symbol Expression- express their own ideas through their own design Reflection- reflect upon what they think is important in a Christmas symbol linked to colours, shapes etc</p> <p><b>Key knowledge:</b></p> <p>To understand that a symbol is a picture that stands for something else.</p> <p>To know the difference between a religious and commercial christmas symbol</p>	<p>Unit 4.6</p> <p>LO: To explore animation</p> <p>Key Skills:</p> <ul style="list-style-type: none"> <li>• Create a simple animation using a flip book</li> <li>• Create a simple animation on a program</li> </ul> <p>Key Knowledge:</p> <ul style="list-style-type: none"> <li>• To know what an animation is (a sequence of pictures moving in a frame)</li> </ul>

	<p>ideas and processes</p> <p>using straightforward scientific evidence to answer questions or to support their findings.</p> <p><b>Key Knowledge:</b></p> <p>compare and group materials together, according to whether they are solids, liquids or gases</p> <p>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)</p> <table border="1" data-bbox="315 616 685 963"> <thead> <tr> <th colspan="3">metals</th> </tr> <tr> <th>Metal</th> <th>Melting point (°C)</th> <th>Boiling point (°C)</th> </tr> </thead> <tbody> <tr> <td>Aluminium</td> <td>660</td> <td>2470</td> </tr> <tr> <td>Copper</td> <td>1085</td> <td>2562</td> </tr> <tr> <td>Gold</td> <td>1064</td> <td>2970</td> </tr> <tr> <td>Iron</td> <td>1538</td> <td>2862</td> </tr> <tr> <td>Lead</td> <td>327</td> <td>1749</td> </tr> <tr> <td>Mercury</td> <td>-39</td> <td>357</td> </tr> </tbody> </table>	metals			Metal	Melting point (°C)	Boiling point (°C)	Aluminium	660	2470	Copper	1085	2562	Gold	1064	2970	Iron	1538	2862	Lead	327	1749	Mercury	-39	357	<p>Looking at how to protect from flooding such as dams:</p> <p>Building dams and flood barriers, such as the Thames Barrier, London can prevent flooding in some areas. However, blocking a river at one location can cause flooding further up or downstream.</p>		
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<p><b>Week 6</b></p>	<p><b>S.K.L.O:</b> To investigate whether the size of a container affects the amount of gas inside</p> <p><b>W.S.L.O:</b> To use labelled diagrams</p> <p><i>**for this experiment, you will need unopened fizzy drinks in different size bottles (500ml, 1.5L and 2L). You open the bottle, and put a balloon on the top as quick as you can. Observe what happens to the balloon over the course of the lesson. Use labelled diagrams and observational notes to make observations. **</i></p> <p><a href="https://lifestyle.howstuffworks.com/">https://lifestyle.howstuffworks.com/</a></p>	<p><b>LO: To understand the causes and effects of water pollution.</b></p> <p><b>Key skills</b></p> <ul style="list-style-type: none"> <li>•Use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied</li> </ul> <p><b>Key knowledge</b></p> <ul style="list-style-type: none"> <li>•Locate the world's countries, using maps to focus on Europe (including the location of Russia) and North and South America, concentrating on their</li> </ul>	<p><b>**evaluation lesson**</b></p> <p><b>L.O: To reflect upon the key question</b></p> <p><b>**key question: What is the most significant part of the Nativity story for Christians today?*</b></p> <p><i>Qu to ask: What part of the Christmas story do you think might be the most important for a Christian and why?</i></p> <p><b>Key skills:</b></p>	<p>IF TIME DO LESSON 3 OF UNIT 4.6 - STOP MOTION</p> <p>LO: • To edit an animation</p> <p>Key Skills:</p> <ul style="list-style-type: none"> <li>• Pupils can use the Onion Skin tool to create an animated image.</li> <li>• Pupils can use backgrounds and sounds to make more complex and imaginative animations</li> </ul> <p>Key Knowledge:</p> <ul style="list-style-type: none"> <li>• To know what onion skinning is in animation (to see</li> </ul>																								

	<p><a href="#">crafts/science-projects/science-projects-for-kids-states-of-matter4.htm</a></p> <p><b>Key skills:</b>  recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables</p> <p>reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions</p> <p>using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions</p> <p>using straightforward scientific evidence to answer questions or to support their findings.</p> <p><b>Key Knowledge:</b></p> <p>Gases can dissolve in a liquid, as this example of soda pop in a balloon shows. But they won't stay there if you release the pressure that holds them.</p> <p>Soda pop is carbonated. This means that carbon dioxide gas has been dissolved in the liquid under high pressure.</p> <p>Opening the bottle releases the pressure, and the carbon dioxide gas begins to escape from the liquid. The balloon trapped the carbon dioxide gas as it left the bottle, and then the gas inflated the balloon.</p>	<p>environmental regions, key physical and human characteristics, countries, and major cities</p> <p>Describe and understand key aspects of:</p> <p>-Physical geography, including rivers and the water cycle and</p> <p>Pollution is classed as anything that is introduced into a habitat which has a harmful effect on plants and animals living there.</p> <p>To know that water pollution is :  Discharge of domestic and industrial effluent wastes, leakage from water tanks, marine dumping, radioactive waste and atmospheric deposition are major causes of water pollution. Heavy metals that disposed off and industrial waste can accumulate in lakes and river, proving harmful to humans and animals</p> <p>Unsafe water kills more people each year than war and all other forms of violence combined.</p> <p>Meanwhile, our drinkable water sources are finite: Less than 1 percent of the earth's freshwater is actually accessible to us.</p>	<p>Evaluation- evaluating their own ideas linked to the key question</p> <p>Expression- express their views and opinions towards the key question</p> <p>Reflection - reflect their own thoughts towards the key question in order to answer it</p> <p><b>Key knowledge:</b></p> <p>Recap and use all knowledge learnt to answer the key question in their own response.</p>	<p>multiple frames at once in order to edit)</p>
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