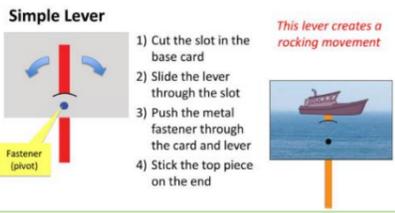
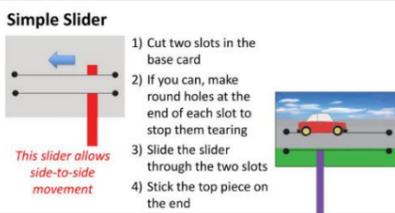




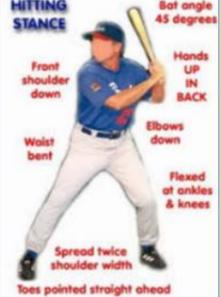
Aspirations – Collaboration – Connections – Creativity - Expression

Learning Unit 2 – The Man on the Moon (6 weeks)				
Experiences / Visits	Rocket launch experience		Forest Schools	
SUBJECT	PRIOR KNOWLEDGE	EXPECTED	POSSIBLE MISCONCEPTIONS	Further Extension
<p><b>SCIENCE</b> <b>KSU</b></p> <p><b>Everyday Materials</b></p>	<p>Describe simple physical properties of a variety of everyday materials using everyday language or simple science vocabulary</p> <p>Group and sort everyday materials according to their simple physical properties</p> <p>Name a range of everyday materials including wood, plastic, metal, rock, brick, cardboard</p> <p>Distinguish between an object and the material from which it is made</p>	<p>Identify and compare the suitability of a variety of everyday materials for particular uses including: wood, metal, plastic, glass, brick, rock, paper and cardboard</p> <p>Know that some materials are used for more than one thing (metal can be used for coins, cans, cars and table legs; wood can be used for matches, floors, and telegraph poles) or different materials are used for the same thing (spoons can be made from plastic, wood, metal, but not normally from glass)</p> <p>Explain how the properties of materials that make them suitable or unsuitable for particular purposes</p> <p>Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching</p> <p>Application - Apply their understanding of materials when creating a rocket to launch, explaining the choice of materials in relation to their physical properties</p> <p><b>Working Scientifically</b> Observe closely, identifying and classifying the uses of different materials, and recording their observations Perform simple tests to check the properties of materials <a href="#">BBC Bitesize – identifying materials</a></p>	<p>Some children may think:</p> <ul style="list-style-type: none"> <li>materials are only used to make one thing</li> <li>everyday items are only made from one material (<i>Some everyday items are made using a mixture of materials</i>)</li> </ul>	<p>Explain why a spoon would not usually be made from glass</p> <p>Explain why umbrellas aren't made from cardboard</p>
<p><b>HISTORY</b> <b>KSU</b></p> <p><b>Significant individual</b></p> <p><b>Know how... Know how to...</b></p>	<p>Explore the natural world around them, making observations and drawing pictures of animals and plants</p> <p>Understand some important processes and changes in the natural world around them, including the seasons</p> <p>Describe what they see, hear and feel whilst outside</p> <p>Understand the effect of changing seasons on the natural world around them</p>	<p>Know some key events about space travel and place these in chronological order on a timeline</p> <p>Recount the life of a famous person who lived in the past, including what they did earlier and what they did later</p> <ul style="list-style-type: none"> <li>Neil Armstrong had his first aeroplane ride in 1936, aged 6</li> <li>He flew a fighter jet in 1950</li> <li>He had his first flight in space 1966</li> <li>He was the first man to land on the moon in 1969</li> </ul> <p>Explain the impact of famous people on our lives today</p> <ul style="list-style-type: none"> <li>Neil Armstrong and Buzz Aldrin (Commander and Pilot for first successful moon landing 1969)</li> <li>Mae Jemison (first black woman to travel into space 1992)</li> </ul> <p>Teacher notes – Space history</p> <ul style="list-style-type: none"> <li>1949 Albert II was the first monkey in space. He was a Rhesus monkey, a type of monkey that originally comes from Asia.</li> <li>1957 Russia launched the first satellite into space; Sputnik 1, and the space age had properly begun! Sputnik was the first satellite in orbit around the earth. Today there are over 500 working satellites in space. Sputnik means "Satellite" in Russian.</li> <li>1957 Russian space dog, Laika became the first animal to orbit the earth and her mission helped scientists understand whether people could survive in space.</li> <li>1961 Russian Cosmonaut Yuri Gagarin became the first man in space.</li> <li>1963 The first woman in space was Russian cosmonaut Valentina Tereshkova.</li> <li>1969 On 20th July 1969, Neil Armstrong, and then Buzz Aldrin took "one small step" and became the first men on the moon.</li> <li>1991 In 1989, Helen Sharman entered a competition to become the first British astronaut in space. After 18 months of intensive training, Helen was part of a Russian mission to the MIR space station.</li> <li>1992 Mae Jemison becomes the first black woman to travel in space</li> <li>2000 The first permanent crew moved into the International Space Station (ISS), where crews of astronauts have been living ever since.</li> </ul> <p><a href="#">Timeline website</a> <a href="#">Planet website - NASA</a> <a href="#">Planet website - Britannica</a></p>	<p>Some children may think:</p> <ul style="list-style-type: none"> <li>humans have travelled to other planets rather than just the Moon</li> <li>humans have never left the Earth</li> </ul>	<p>Talk about space travel events over time and suggest how space travel might evolve in the future</p>



SUBJECT	PRIOR KNOWLEDGE	EXPECTED	POSSIBLE MISCONCEPTIONS	Further Extension
<p><b>DESIGN AND TECHNOLOGY</b> KSU</p> <p><b>Mechanisms – sliders and levers</b></p> <p><b>Know....</b> <b>Know how to....</b></p>	<p>Children will have explored a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function independently and with others</p> <p>Design / Make / Evaluate: Castle with moving drawbridge</p> <p>Focus on hinges: Cutting battlements, door with a hinge, safely putting a hole through card, threading string to create moving drawbridge</p>	<p><b>RESEARCH:</b> Know that sliders and levers can make things move Know the type of movement generated using a slider and a lever Understand how a slider and lever allow movement Product analysis – explore how real cards that include a slider or lever works Use the words: up, down, left, right, vertical and horizontal to describe movement</p> <p><b>DESIGN:</b> Design a Christmas card with a simple moving mechanism (e.g. using a slider where Santa’s sleigh moves across the sky / or a lever for a sledge sliding down a hill)</p> <p><b>MAKE:</b> Know how to cut and assemble simple mechanisms using card and scissors</p> <p><b>EVALUATE:</b> Evaluate their lever or slider card and compare it to their original design. What worked well? What could be improved?</p> <p><a href="#">How to make moving pictures (sliders and levers)</a></p> <div style="display: flex; justify-content: space-around;"> <div data-bbox="594 926 989 1139"> <p><b>Simple Lever</b></p> <ol style="list-style-type: none"> <li>1) Cut the slot in the base card</li> <li>2) Slide the lever through the slot</li> <li>3) Push the metal fastener through the card and lever</li> <li>4) Stick the top piece on the end</li> </ol> <p><i>This lever creates a rocking movement</i></p>  </div> <div data-bbox="1024 926 1419 1139"> <p><b>Simple Slider</b></p> <ol style="list-style-type: none"> <li>1) Cut two slots in the base card</li> <li>2) If you can, make round holes at the end of each slot to stop them tearing</li> <li>3) Slide the slider through the two slots</li> <li>4) Stick the top piece on the end</li> </ol> <p><i>This slider allows side-to-side movement</i></p>  </div> </div>	<p>Some children may think that:</p> <ul style="list-style-type: none"> <li>• design is only about making something look beautiful (<i>the product should be appealing but it also has a particular purpose – in the case of the cards, the moving parts make them fun and interesting</i>)</li> <li>• all pictures are still</li> <li>• all pop-up books use flaps</li> </ul>	<p>Explain why the tools and resources I used were the right tools and resources for the job</p> <p>Design a page of a favourite story book to include a moving picture. Would a lever or mechanism work best? Why?</p> <p>i.e. vertical slider for a rocket or a lever for a boat</p>
<p><b>COMPUTING</b> KSU</p> <p><b>Coding</b> (finished off from Learning Unit 1)</p> <p><b>Online Safety</b> (Purple Mash)</p> <p><b>Know...</b> <b>Know how to....</b></p>	<p>Know how to login and log off safely and understand why it is important to keep login information safe</p> <p>Understand the importance of logging out when they have finished</p>	<p><i>NB: Coding (detailed in Learning Unit 1) is a longer computing unit so it will run into Learning Unit 2</i></p> <p><b>Online Safety</b> Know how to refine searches using the Search tool Know how to share work electronically using the display boards Use digital technology to share work on Purple Mash to communicate and connect with others locally Develop knowledge and understanding about sharing more globally on the Internet Understand how we talk to others when they are not there in front of us Open and send simple online communications in the form of email Understand that information put online leaves a digital footprint or trail Begin to think critically about the information they leave online Identify the steps that can be taken to keep personal data and hardware secure</p>	<p>Some children may think:</p> <ul style="list-style-type: none"> <li>• it is OK to share passwords or login details</li> <li>• they do not need to logout because the computer will do it automatically</li> </ul>	<p>Children to think of examples of things that they would not want to be in their own digital Footprint</p> <p>Create a poster telling others what should not be shared online</p>
<p><b>ART AND DESIGN</b> KSU</p> <p><b>Texture and Form</b></p> <p><b>Pattern</b></p> <p><b>Know...</b> <b>Know how to....</b></p>	<p>Create 3D models from imagination, experience or observation – children used natural materials to create sculptures based on the work of Andy Goldsworthy</p>	<p>Ask questions about art and artists that create figurative sculpture using clay (Coille Hooven and Brendan Hesmondalgh) exploring similarities and differences Describe artwork and comment on, or provide an opinion about, a piece of artwork Practise using hands to sculpt clay by squashing and rolling (creating different shapes) Experiment with tools to create patterns in clay Sketch designs for a 3D alien model (identify what shapes they will need to create with the clay) and review what they and others have done, saying what they think and feel about it Shape and form clay to a specific design (alien design – shape different parts) Use slip clay (old bits of clay and water) and a tool (to score the pieces to stick) to join the clay pieces together Know how to indent clay to create patterns and textures Show an understanding of ‘additive sculpture’ (sticking parts together) Identify what they might change in their current work or develop in their future work</p> <p>Teachers notes: <a href="#">BBC Sculpture video (including clay)</a></p> <div style="display: flex; justify-content: space-around;"> <div data-bbox="594 2439 730 2576">  <p><a href="#">Coille Hooven</a> (figurative sculpture using clay)</p> </div> <div data-bbox="594 2594 865 2792">  <p><a href="#">Brendan Hesmondalgh</a> is a Yorkshire based sculptor who works primarily in clay, wax and bronze</p> </div> </div>	<p>Some children may think:</p> <ul style="list-style-type: none"> <li>• if they make a mistake, they can’t correct it when working with clay</li> <li>• paintings are art, sculpture is not</li> </ul>	<p>Redesign their alien using what they identified from their evaluation (i.e. maybe they think the pattern should be different)</p>



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<p><b>PE</b> <b>KSU</b></p> <p><b>Striking and Fielding</b></p> <p><b>Know... Know how to...</b></p>	<p>Foundations of: Agility Running and Stopping Throwing and Catching</p> <p>Develop effective catching technique (working in pairs)</p>	<p>Know how to control objects and send them to a partner with increasing control</p> <p>Be able to take turns and join in with all activities even if they find them difficult</p> <p>Develop ability to roll a ball with increasing accuracy</p> <p>Demonstrate a good stopping / catching technique (<i>When stopping the ball or catching, place their hands close together, fingers apart and outstretched, soft hands</i>)</p> <p>Develop technique for throwing with accuracy (<i>When throwing for accuracy it is best to throw under-arm, with a slight bend in the knee. On release the children should point their fingers at their target, moving their arm in a steady motion.</i>)</p> <p>Demonstrate effective batting stance, with a racket (<i>Swing racquet in a motion that is parallel to the floor, keeping eyes on the ball</i>)</p> <p>Be able to show why they are good at something and what others are good at</p> <p>Be able to show or tell what they are doing to get better at something and show how they have improved</p> 	<p>Some children may think:</p> <ul style="list-style-type: none"> <li>They will master a technique straight away</li> </ul>	<p>Make it competitive – how many passes can you do in 1 minute? Can you beat your personal best?</p>
<p><b>RE</b> <b>KSU</b></p> <p><b>Creation Story (Christianity)</b></p> <p><b>(Discovery RE)</b></p> <p><b>Know... Know how to....</b></p>	<p>Talk about a gift that is special to them</p> <p>Recall some of the Christmas story</p> <p>Suggest a gift they would give to Jesus</p>	<p><i>Theme: Christmas – Jesus as a gift</i></p> <p><i>Concept: Incarnation</i></p> <p><i>Religion: Christianity</i></p> <p><i>British Values: Individual Liberty, Mutual Respect, Tolerance</i></p> <p><i>SMSC: Spiritual, Moral</i></p> <p><b>My learning is to:</b></p> <p>Know how I could help solve a problem by showing love</p> <p>Remember and recall the Christmas story</p> <p>Reflect on the Christmas Story and the reasons for Jesus’ birth</p> <p>Understand that Christians believe Jesus was a gift from God and begin to explain why Christians think God gave Jesus to the world</p> <p>ART link – apply knowledge about clay (from art learning) to create a Christmas candle holder (adding patterns with tools) and wrap these to give as a gift to family members</p>	<p>Some children may think:</p> <ul style="list-style-type: none"> <li>presents are the only types of gifts (<i>we also talk about giving the gift or kindness or showing someone you care – this can be just as valuable, or more valuable, to someone than a present that has been bought</i>)</li> </ul>	<p>Explain how Jesus coming to the world shows Christians how they can love and help people and the world – how might Christians do this?</p>
<p><b>PSHE</b> <b>KSU</b></p> <p><b>Celebrating Difference</b></p> <p><b>(Jigsaw PSHE)</b></p> <p><b>Know... Know how to....</b></p>	<p>Identify similarities and differences between people in their class</p> <p>Know what bullying is and how it might feel</p> <p>Know who to talk to if they feel unhappy or are being bullied</p> <p>Know how to make friends</p>	<p><i>Theme: Celebrating Difference</i></p> <p><i>British Values: Democracy, Rule of Law, Individual Liberty, Mutual Respect, Tolerance</i></p> <p><i>SMSC: Social, Moral, Cultural</i></p> <p><i>Emotional Literacy: Self-awareness, Social Skills, Empathy</i></p> <p>Begin to understand that sometimes people make assumptions about boys and girls (stereotypes)</p> <p>Understand some ways in which boys and girls are similar and different and accept that this is OK</p> <p>Understand that bullying is sometimes about difference (use the STOP acronym Several Times On Purpose when talking about bullying)</p> <p>Know how to get help if I am being bullied</p> <p>Recognise what is right and wrong and know how to look after myself</p> <p>Understand that it is OK to be different from other people and to be friends with them</p> <p>Understand that differences make us special and unique</p>	<p>Some children may think:</p> <ul style="list-style-type: none"> <li>we all should be the same</li> <li>one gender is better than another</li> </ul>	<p>Suggest solutions to ‘What if?’ problems</p> <p>What if someone thought that only boys play with cars</p> <p>What if someone said only girls could wear pink?</p> <p>What if someone was being mean to you because they thought you were different in some way?</p>

NB: Music is taught by specialist music teachers from Rock it! Music. Please see the Music Knowledge, Skills and Understanding Progression grid for further details.