


<p><b>Willow Spring 1 C&amp;L / Literacy topic:</b></p> <p>*I know that a year is the length of time it takes for the Earth to travel once around the sun. *I know that many people celebrate a New Year, though on different days and in different ways. *I listened to stories written by / about some amazing people that dreamed of one day going into space. Spoiler alert: they became astronauts! - though not without hard work and determination. *I learned about rockets - and can tell you about the Apollo 11 moon mission. *I learned some interesting moon facts - and listened to some fantastical moon stories too! *I found out about the planets in our solar system and the sun at its centre. *I used music to help me imagine what the planets might be like. * I know that Earth is unique and precious for its ability to sustain life.</p>		<p><b>Out of the World! Our Place in Space.</b></p> 
<p><b>Weekly focus (6 weeks)*:</b></p>		
<p>* Happy New Year! Celebrating one more journey around the Sun.</p> <ul style="list-style-type: none"> <li>• Aspiring astronauts...</li> <li>• ...and remarkable rockets! <ul style="list-style-type: none"> <li>• The Moon</li> <li>• The Solar System</li> <li>• Back down to Earth</li> </ul> </li> </ul>		
<p><b>*Aspects may change in response to the children's interests / planning 'in the moment'.</b></p>		
<p><b>Key Vocab</b></p>		
<p>Understanding the World</p>	<ul style="list-style-type: none"> <li>• Children build their understanding of the natural cycle of the seasons. They can distinguish Winter from the other seasons, spotting some of the 'signs of Winter' in the natural world around them.</li> <li>• A variety of New Year traditions will be introduced – including Japanese tradition of making and eating of mochtsuki moon cakes. Children continue to build an understanding of the fact that people celebrate special days in different ways and according to different customs.</li> <li>• They learn about a historic event - the Apollo 11 moon mission. A visiting Willow grandparent will share their recollections from the time.</li> <li>• They learn about the role technology plays in supporting human space endeavour, finding out about the Mars rovers.</li> <li>• Children learn that Earth is unique in its ability to sustain life. They will learn that we have a duty of care for our planet.</li> <li>• Engage in focused observation of the natural world during forest school sessions.</li> </ul>	<p><b>Space:</b> Everything in the universe beyond the Earth's atmosphere</p> <p><b>Orbit:</b> The path of an object around a particular point in space. For example, the Earth orbits the sun once every 365 days.</p> <p><b>Astronaut:</b> Someone trained and equipped for space travel and that has served onboard a space vessel.</p> <p><b>Hero:</b> Someone distinguished by their courage and ability, admired for their brave deeds and noble qualities, and regarded as model or ideal.</p> <p><b>Gravity:</b> The force that pulls things together.</p> <p><b>Mission:</b> A job given to a person or group of people. A mission might involve travel - and sometimes a level of challenge or danger.</p> <p><b>Moon:</b> The Moon is Earth's only natural satellite. The moon orbits the Earth once every 27 days.</p> <p><b>Moon / Lunar phases:</b> the apparent shape of the moon's sunlit portion, as viewed from Earth. The amount of the moon we see illuminated changes over the month as it passes through its 8 moon – or luna – phases.</p> <p><b>Solar system:</b> A collection of 8 planets that orbit around the Sun at its centre. Earth is the third planet in the solar system.</p> <p><b>Sun:</b> The star at the centre of our solar system.</p> <p><b>Robot:</b> A machine that has been programmed to perform often complex series of actions automatically.</p> <p><b>Alien/Martian:</b> coming from another world. A Martian specifically comes from Mars.</p> <p><b>Seasons:</b> The year is divided into 4 seasons, each with distinctive natural characteristics and weather. It is currently the season of Winter.</p>
<p><b>Sticky Knowledge</b></p>		
<p>Personal, social and emotional</p>	<ul style="list-style-type: none"> <li>• The value of aspiration, resilience and hard work underpin several of our stories, which will include diverse role-models, both real (Chris Hadfield, Mae Jemison, the crew of the Apollo 11) and fictional (Rocket).</li> <li>• Value of teamwork and collaboration will be stressed and tested in our 'astronaut training' activities.</li> <li>• Dialogic storytelling will support children to see how the values of aspiration, resilience and hard work can also help us achieve our dreams and goals - in space or elsewhere (an idea to be further built on by our Jigsaw PSHE unit).</li> <li>• During whole-class activities, inc. building box-rockets and robots, children will share resources and act cooperatively with their classmates.</li> </ul>	<ul style="list-style-type: none"> <li>• A year lasts 365 days, which is the length of time it takes for the Earth to orbit once around the Sun. Each new year we remember a complete voyage around the sun.</li> <li>• New Year is celebrated across the world - though not always on the same day, and not always in the same way. Lots of different traditions exist, including in Japan where it is customary to make and eat mochtsuki moon cakes.</li> <li>• The seasons result from the way the earth is tilted, meaning that sometimes we are closer to the sun, and sometimes further away. This causes differences in our temperature and in the amount of light that reaches us, impacting on the cycle of growth on Earth. We are currently tilted away from the sun: it is cold, and the days are short. It is Winter.</li> <li>• An astronaut is the name given to someone that has travelled to space. Being an astronaut is a difficult but rewarding job. To become an astronaut, you must work hard</li> </ul>

Expressive Arts & Design	<ul style="list-style-type: none"> <li>Children will take on a planetary role in our big-playground solar system recreation. They will follow their own orbital line around a central sun.</li> <li>Work on a bigger scale, with a range of materials when we build box-rockets. These - and other space-themed builds will make props for our play.</li> <li>Art and DT activities will include....</li> <li>We will sing space themed nursery rhyme, 'Rocket ship' by Laura Doherty, and listen to music that evokes space - including Holst's Planet Suite.</li> <li>Our engagement with robots will be built on through movement-based activities, as we learn a simple robot dance together.</li> </ul>
Physical Development	<ul style="list-style-type: none"> <li>Both fine and gross motor skills will be tested by a number of topic activities – to include 'astronaut training exercises' and using a range of small tools when completing art / craft activities.</li> </ul>
Literacy	<ul style="list-style-type: none"> <li>Children complete short written pieces in response to the stories / non-fiction texts we have shared together, and in relation to our topics of conversation.</li> <li>Children will be encouraged to integrate writing into their space-themed play and craft.</li> </ul>
Maths	<ul style="list-style-type: none"> <li>Children apply their knowledge and intuitive sense of shape, space, and measure in various topic tasks.</li> <li>We will engage in lots of 'counting back' as we pretend to blast off into space 😊</li> </ul>

- and overcome challenges - like Chris Hadfield and Mae Jemison did.
- Space can be reached on board a powerful rocket that is strong enough to breach our atmosphere - the protective bubble separating our Earth from space.
- People first travelled to the moon on board the Apollo 11 space rocket. It was a hugely important event that was watched with amazement by people all over the world. The 3 astronauts on board the Apollo 11 were true heroes!
- Gravity is the force that pulls things together. When you drop or throw something, gravity pulls it back to the ground. There is no gravity in space, meaning that if you drop or throw something in space, it floats away. This can complicate simple activities such as brushing your teeth or having a snack!
- The moon is spherical. It only appears to change shape as it passes through different phases. For example, sometimes it's entire face glows brightly in a full moon. Sometimes we only see the thin slither of a crescent moon.
- The light of the moon is in fact reflected sunlight! The moon itself doesn't emit light. We see different amounts of reflected light at different points in its orbit, which creates the effect of the lunar - or moon phases.
- There are lots of stories told about the moon, some of them very creative! We know that the moon isn't really made of cheese, but the idea makes us laugh!
- Our solar system is composed of 9 planets orbiting the sun at its centre. The sun is a star which gives us light and warmth.
- The different planets have different appearances, sizes, and qualities. Earth is distinguished by the fact it can sustain life. It's home to a huge diversity of plants and animals that live in a range of different habitats. It's just right for us, so we must take good care of it and the creatures and plants that we share it with.
- Although people haven't yet visited Mars, they have sent robots there. These rover robots travel its surface, sending back pictures and taking rock samples. They help scientists back on Earth learn more about the red planet, even from a distance. How amazing!
- Robots can help people with a range of tasks - some of which would be too tricky, slow or dangerous for a human. Robots can help us get a job done quickly and safely!

**Enrichment opportunities**

Grandparent visit to talk about Apollo 11 launch  
 Visit from Mrs Dineley, UK Space Agency  
 Dress in red for Rover! Non uniform day.  
 An in-class theatre experience watching the Roustabout Theatre's production of 'Dinosaurs and All that Rubbish' (performance kindly shared with us by the Roustabout Theatre)

**Links to learning in KS 1 & 2**

links to y3 science - light (the sun is a light source)  
 links to Year 4 science - lights and shadows  
 links to Year 5 science - inspirational role models - Catherine Johnstone and Mae Jemison  
 Links to Year 6 science – light

**Topic books to include...**