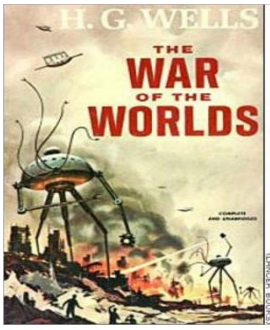



Medium Term Planning Autumn 2

Year 5

Topic:	Lost in Space	
Main Subject	Science	
Linked Subjects	Geography (world from the ISS), DT (Mars Rover), PSHE	
NC objective	Earth and Space	
Main subject key knowledge and skills	<ul style="list-style-type: none"> *describe the movement of the Earth, and other planets, relative to the Sun in the solar system. *describe the movement of the Moon relative to the Earth. *describe the Sun, Earth, Moon as approximately spherical bodies. *use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky. 	
Linked subject key knowledge and skills	<ul style="list-style-type: none"> *know the names of a number of European capitals. *use maps to locate European countries and capitals. *use maps and globes to locate the equator, the Tropics of Cancer and Capricorn and the Greenwich Meridian. *know about time zones and work out differences. *I can design a product that requires pulleys or gears. *I can make a prototype before making a final version. *I can make a product that relies on pulleys or gears. *I can link scientific knowledge to design by using pulleys or gears. 	
Main Text	 <p>War of the Worlds</p>	
Main Writing Genre	Newspaper Report	Science Fiction Stories
Enrichment	Planetarium visit W2, Now Press Play, Science fiction films	

<p>Weekly overview - PSHE (3 days)</p>	<p>TLC: I can discuss belonging to a community.</p> <p>TLC: I can discuss protecting our learning environment.</p>
<p>Weekly overview - Science (2 weeks)</p>	<p>L1: <u>T.L.C.</u>: Can I describe the Sun, Earth and Moon as approximately spherical bodies?</p> <p>L1:T.L.C: Can I identify scientific evidence that has been used to support or refute ideas?</p> <p>L2 :<u>T.L.C.</u>: Can I use the idea of the Earth's rotation to explain day and night and the apparent movement of the Sun across the sky?</p> <p><u>L2:T.L.C.</u>: Can I talk about and present findings from enquiries, including conclusions and causal relationships?</p> <p>L3 :<u>T.L.C.</u>: Can I describe the movement of the Earth, and other planets, relative to the Sun in the Solar System?</p> <p><u>L3:T.L.C.</u>: Can I record data using scientific diagrams and labels?</p> <p>L4 <u>T.L.C.</u>: Can I describe the movement of the Earth, and other planets, relative to the Sun in the Solar System?</p> <p>L5<u>T.L.C.</u>: Can I report and present findings from enquiries using appropriate scientific language?</p> <p>L6 :<u>T.L.C.</u>: Can I describe the movement of the Earth and other planets relative to the Sun?</p> <p><u>L6:T.L.C.</u>: Can I record data and results of increasing complexity in a line graph?</p> <p>L7: <u>T.L.C.</u>: Can I describe the movement of the Moon relative to the Earth?</p> <p>L8: Assessment lesson</p>

<p>Weekly overview - Geography (2 weeks)</p>	<p>L1 - K & W L2 - <u>T.L.C</u>: Can I identify features on a world map and globe and recognise Lines of Latitude? L3- <u>T.L.C</u>: Can I research the features and conditions of different climate zones? L4- <u>T.L.C</u>: Can I describe the daily patterns of day and night and the significance of Lines of Longitude on time zones? L5- <u>T.L.C</u>: Can I describe features of the world based on their geographical locations? L6- <u>T.L.C</u>: Can I research the benefits and uses of the ISS? L7 - Kahoot and L</p>
<p>Weekly overview - DT (1 weeks)</p>	<p>L1: Can I come up with a range of ideas after I have collected information? (Design) L2: Can I use a range of tools and equipment expertly? (Make) L3: Can I test and evaluate my product? (Evaluate) L4: Can I use innovative combinations of electronics (or computing) and mechanics in product designs? (Technical Knowledge) L3: Can I test and evaluate my final product? (Evaluate)</p>
<p>Weekly overview - RE (1 week)</p>	<p>U2.3 What are the different ways to worship? What are the differences and similarities between religions? TLC: I can discuss what it means to pray TLC: I can discuss why people talk to God. TLC: I can understand how Muslims, Hindus and Christians pray. TLC: I can identify similarity and differences in ways to worship.</p>
<p>Reflection of Learning</p>	<p>Podcast in Computing Quizzes and KWL</p>
<p>Sticky Knowledge</p>	<p><u>Sticky knowledge</u></p> <ul style="list-style-type: none"> ❑ The ISS has been operational since 2000. It has been continuously occupied since then. Groups of astronauts stay for about six months conducting scientific research and the swap over with another group of astronauts. ❑ The ISS orbits the Earth at an altitude (height) of between 330km and 410km. ❑ It orbits at 17,500 miles per hour- it takes about 90 minutes to make an orbit. ❑ 45 minutes of the orbit will be in daylight and 45 minutes will be at night. ❑ It makes 15.7 orbits every day.

	<ul style="list-style-type: none"> ❑ The world map that is familiar to most of us is the Mercator projection, but it is full of distortions so some countries appear larger or smaller than they actually are. ❑ The Earth and other planets in our Solar System orbit the Sun. ❑ The Moon orbits the Earth. ❑ The Moon appears to change shape due to the amount of sunlight that we can see reflected on it. ❑ We have day and night because of the Earth's rotation on its axis. ❑ The Sun, Earth, Moon and the other planets in our Solar System are roughly spherical.
British values/citizenship	<p>Compare: Will it be easier for people to go to space?</p> <p>Discuss: When will it be possible to take holidays in space?</p>
Maths links	<p>Line graphs - tracking daylight</p> <p>Working out your age on other planets</p> <p>Describing shapes (3D / 2D)</p>
Computing links	<p>Radio stations - podcast linking to knowledge</p> <p>Green screen newsbroadcast</p>
Outdoor learning	<p>Tracking shadows</p> <p>Checking the sun - where does it rise / set</p> <p>Simulating the planets orbit</p>
Home learning	<p>Research a planet</p> <p>Write a fact file on an astronaut</p> <p>Make your own planet / write a fact file on your planet</p>