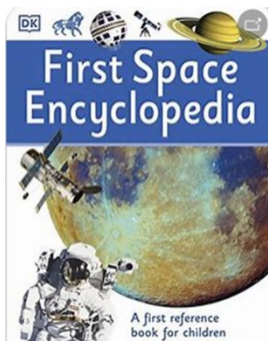
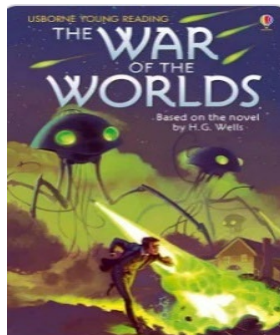


Medium Term Planning Autumn 1

Year 5

Topic:	Lost in Space	
Main Subject	Science	
Linked Subjects	Geography (world from the ISS), DT (Mars Rover),	
NC objective	Earth and Space	
Main subject key knowledge and skills	*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	*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		
Writing consolidation	Week 1: grammar and sentence composition consolidation	
Main Writing Genre	Non- Chronological report	Science fiction story

Maths	Place value 3 weeks Addition and subtraction 2 weeks Multiplication and division 1 week
Vocabulary that will be taught	Topic: International Space Station, Time Zones, tropics, polar, tropical and temperate regions, Science: Orbit, Rotation, Spherical, Axis, Star, Moon.
Enrichment	Planetarium visit, Now Press Play, and Moon rocks.
Weekly overview – PSHE (1 lesson per week)	L1: Including others L2: Positive and respectful friendships L3: Bullying and its impact L4: Challenging stereotypes L5: Addressing extremism L6: A world of difference L7: Assistance dogs
Weekly overview – Science (3 weeks)	L1 Elicitation task L2: <u>T.L.C</u> : Can I describe the Sun, Earth and Moon as approximately spherical bodies? L2: Can I identify scientific evidence that has been used to support or refute ideas? L3 : <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? <u>L3:T.L.C</u> : Can I talk about and present findings from enquiries, including conclusions and causal relationships? 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? L4: TLC: Can I use test results and existing knowledge to make predictions to set up further comparative and fair tests? L5:T.L.C: Can I report and present findings from enquiries using appropriate scientific language? L6: TLC: Can I record data and results of increasing complexity using line graphs? L7: <u>T.L.C</u> : Can I describe the movement of the Moon relative to the Earth? L7:TLC: Can I record information of increasing complexity using scientific diagrams and labels? L8: Assessment lesson
Weekly overview – Geography (2 weeks)	L1 – Introduction and KW L2 - T.L.C: Can I identify features on a world map and globe and recognise Lines of Latitude? L3 Can I describe the daily patterns of day and night and the significance of Lines of Longitude on time zones? L4 - Can I identify the different lines of latitude and explain how latitude is linked to climate L5- T.L.C: Can I describe features of the world based on their geographical locations? L6- Can I explain how the ISS benefits the Earth? L7 - Can I explain what our world is like from the ISS? Assessment page

Weekly overview – DT (2 weeks)	L1: Can I come up with a range of ideas after I have collected information? (IEA) L2: Can I use a range of tools and equipment expertly? (FT) L3: Can I test and evaluate my product? (IEA) L4: Can I use innovative combinations of electronics (or computing), mechanics and joining techniques in product designs? (DMEA) L5: Can I test and evaluate my final product? (DMEA)
Weekly overview – RE (1 week)	TLC: Can I describe some examples of what different Hindus do to show their faith? TLC: Can I describe some ways in which Hindus express their faith through puja, aarti and bhajans? TLC: Can I explain similarities and differences between Hindu worship and worship in another religious tradition they are familiar with?
Reflection of Learning	Quizzes and assessment of learning posters.
Sticky Knowledge	<u>Sticky knowledge</u> ★ The Sun is a star. It is at the centre of our solar system. ★ There are 8 planets. These travel around the Sun in fixed orbits. ★ Earth takes 365¼ days to complete its orbit around the Sun. ★ The Earth rotates (spins) on its axis every 24 hours. As Earth rotates half faces the Sun (day) and half is facing away from the Sun (night). As the Earth rotates, the Sun appears to move across the sky. ★ The Moon orbits the Earth. It takes about 28 days to complete its orbit. ★ The Sun, Earth and Moon are approximately spherical.
British values/citizenship	Democracy-working in teams and voting to make decisions (DT). Rule of law- PSHE Individual liberty- PSHE and RE. Mutual respect and tolerance. PSHE and RE
Maths links	Line graphs – tracking daylight Working out your age on other planets Working out times in different time zones,
Computing links	The children will take what they have learnt in this term and create a space quiz in Scratch in Aut 2.
Outdoor learning	Tracking shadows Checking the sun – where does it rise / set Simulating the planets orbit and distance from the Sun.
Home learning	Research a planet Write a fact file on an astronaut Make your own planet / write a fact file on your planet