

# UKS2 – Assembly Plan 1

## How has space science changed our lives?

*How does space exploration help us here on Earth?*

### Preparation:

- Images of satellites, GPS, solar panels, space tech used on Earth
- Short video clip of astronauts using space inventions
- Props or slides to show everyday items that come from space research (e.g. cordless vacuum, memory foam, infrared thermometer)
- Background music: Star Wars Main Theme or Apollo 13 Theme

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| 1 | <p><b>Welcome and Introduction (3 minutes):</b></p> <p>Say:<br/>“Space science isn’t just about rockets and astronauts... it’s also about life here on Earth!”</p> <p>Ask:<br/>“Can you think of anything we use every day that might have come from space research?”</p> <p>Introduce the big question:<br/><b>How has space science changed our lives?</b></p>                                                                                                           |
| 2 | <p><b>Example 1 – Satellites and Communication (5 minutes):</b></p> <p>Explain how satellites help us:</p> <ul style="list-style-type: none"><li>• Watch TV</li><li>• Use mobile phones</li><li>• Access the internet</li><li>• Predict the weather</li></ul> <p>Hold up or show a diagram of how satellites orbit Earth.</p> <p>Ask: “How would your life change without satellites?”</p>                                                                                 |
| 3 | <p><b>Example 2 – Inventions from Space Science (5 minutes):</b></p> <p>Share surprising inventions made possible by space research:</p> <ul style="list-style-type: none"><li>• Memory foam (used in mattresses and astronaut seats)</li><li>• Infrared ear thermometers (from star temperature tech)</li><li>• Scratch-resistant lenses</li><li>• Cordless vacuum cleaners</li></ul> <p>Let children guess which of these come from space – reveal that they ALL do!</p> |

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| 4 | <p><b>Example 3 – Medical and Environmental Impact (5 minutes):</b></p> <p>Space tech has helped:</p> <ul style="list-style-type: none"> <li>• Improve water filtration systems</li> <li>• Monitor climate change</li> <li>• Create better prosthetic limbs</li> </ul> <p>Say: “Sometimes, looking out at space helps us take better care of Earth.”</p>                                             |
| 5 | <p><b>Interactive Moment (6 minutes):</b></p> <p>Hold a quick “True or False” quiz. Ask:<br/>“Did space science help invent...”</p> <ul style="list-style-type: none"> <li>• Trainers with better grip? (✓ Yes – NASA tech)</li> <li>• Fidget spinners? (✗ No)</li> <li>• Solar panels? (✓ Yes – for satellites)</li> </ul> <p>Let children vote with thumbs up/down. Celebrate correct answers!</p> |
| 6 | <p><b>Optional Inspiring Video (4 minutes):</b></p> <p>Play a short clip of how space inventions are used in hospitals, homes or schools.<br/>(E.g. ESA or NASA education outreach videos)</p>                                                                                                                                                                                                       |
| 7 | <p><b>Conclusion (3 minutes):</b></p> <p>Summarise:</p> <ul style="list-style-type: none"> <li>• Space science is everywhere – not just in space</li> <li>• It helps us communicate, stay healthy, and protect the planet</li> </ul> <p>Say: “Science doesn’t just reach for the stars – it improves life for everyone.”</p>                                                                         |

### Reflection

Ask children to close their eyes and imagine inventing something new...  
What problem would it solve? Could space science help you design it?

### Music

Apollo 13 Theme  
Star Wars Main Theme (John Williams)

### Cross-Curricular Links:

Science: Forces, materials, scientific advances  
DT: Design an invention using space tech  
Geography: Use of satellites to monitor Earth  
PSHE: Responsibility for Earth through science