



Here are some useful resources related to space that you might not have come across before. Please note we cannot control the content of external websites.

Linking space to the curriculum

Although space is mainly found in the Year 5 science curriculum it can actually link to many year groups and subjects. For example:

- KS1 history links to the Moon landings.
- Astronauts on the International Space Station are researching **how plants grow** in space
- Scientists and engineers are always researching the best **materials** for space suits, rockets and other things needed for a trip to space
- **Eating healthily** is very important when going into space, astronauts diets are monitored very carefully!
- Astronauts need to do about **2 hours of exercise** each day when in space to keep their muscles strong
- When astronauts are in space their **bones** can lose density so is important that they are careful when they return to Earth and undergo proper rehabilitation.
- We use satellites to observe **weather** patterns from space as well as providing us with GPS, TV and mobile phone signal!
- There are lots of **inventions** created for use in space that we now use everyday here on Earth.
- **Robots** are often used to explore other planets. This includes sampling the **gases** in the air and taking **rock** samples on Mars!
- Lots of **different cultures** have created patterns in the stars and created stories about them
- Objects in space have inspired **music**, **art** and lots of **literature** too!



Interesting videos

Astronauts of all nationalities love making educational videos aboard the International Space Station. Here are a few of our favourites:

- Christina Koch is a record breaking astronaut. Here she answers questions about a year living in space <https://www.youtube.com/watch?v=9KGKlp3J-N4>
- Chris Hadfield reading his book The Darkest Dark https://youtu.be/OOTA_WWPlhk
- Chris Hadfield talking about space food and making a wrap <https://youtu.be/AZx0RIV0wss>
- Space snacks with Samantha Cristoforetti <https://youtu.be/O2XeSUqzpZE>

Local links

Did you know...

- The North East has a thriving space sector! Especially when it comes to satellite development.
- Some of the researchers at Northumbria University work with astronauts to rehabilitate them after spending time on the space station.
- Kielder Observatory is nestled in Northumberland and is in an official dark skies area. They host observing nights and also work with local schools. <https://kielderobservatory.org/>
- The Grubb –Parsons telescope factory was world renowned and some telescopes are still in use in parts of the world today!



Lesson plans/ classroom activities



World Space Week

This occurs annually at the beginning of October. For 2021 it is the 4-10th October and the theme is Women in Space. Their website has lots of interesting ideas for events and activities:

<https://www.worldspaceweek.org/events/event-ideas/educators/>

Mission X: Train like an astronaut

This website is packed full of fun classroom ideas linked to training to be an astronaut. Each year they also have a challenge you can sign up to do. They have activities linked to science, PE and even Astro Art! <https://trainlikeanastronaut.org/>

STEMFEST

STEMFEST 2021 is all about space! This year it is on 7th October. They have loads of fantastic speakers and activities planned! Sign up at on their website:

<https://stemfest.org.uk/>

NUSTEM

Our partners at NUSTEM have a selection of space related careers to slot into your lessons on their careers tool website <https://nustem.uk/primarycareers/#tab-id-3>

SunSpaceArt

This project brings together scientists and artists and has a number of creative activity ideas you could use in the classroom. <https://www.sunspaceart.org/teachers-resources/>

Our Past, Your Future resources

Resources on space and the Grubb Parsons Telescopes can be found in our teacher CPD page <https://museumsnorthumberland.org.uk/project/our-past-your-future/schools/cpd/>

Evening sky maps

A two-page guide to the night sky published each month. These include constellations, specific stars and planets to look out for as well as other events such as meteor showers or comets that might be visible in the night sky.

<http://skymaps.com/downloads.html>

European Space Agency YouTube channel

Lots of videos about space exploration. Their Paxi series is aimed at school children and looks at life on the International Space Station. Each video is between three and five minutes long and they include topics such as how to cut your hair in space, space suits and how astronauts sleep in space.

<https://www.youtube.com/user/ESA>

Stellarium web

A browser-based planetarium that is really easy to use. You can change the time and date to find out what will be in the sky at a given time. You can also turn constellation diagrams and pictures on and off and find out where you can see the planets in the sky.

<https://stellarium-web.org/>

