

Year 7 Science Phase 2 work

Space project

You can present your work in any of the following ways: Posters, PowerPoints, word documents, you can make models etc. Be as creative as you can.

Aim: To research Space and create projects on any of the following areas. You can do several short projects or one longer one on an area of your interest. You can do a project that is not listed below.

YOU DO NOT NEED TO DO ALL OF THE PROJECTS

There are some questions to get you started but you can do more research on each area – do not just answer the questions.

For each project, you need:

- a title
- a list of key words and their meanings
- key information about each project and why you think it is interesting
- images that help to explain your topic.

Project ideas:

Space exploration:

- **Make a timeline showing the history of Space exploration.** When was the first mission into space? What countries were involved? What were the names of the spacecraft?
- **Research the history of the telescope from Nicolas Copernicus to the modern space and radio telescope.** What were the first telescopes like? What are the different type of telescopes? How do the different types of telescopes work?
- **Write about the moon landings:** Who was involved? How did they get there? How many missions were there? What did they do on the moon?
- **Find out about the international space station:** What is it? What do people do on the space station? How do astronauts keep safe, eat, move and wash in the space station?

Planets and stars:

- **Research the planets in our solar system:** What are their names? How do they compare in size? What are their atmospheres like? How hot or cold are they? Have there been any missions to explore them? What makes them orbit the Sun?
- **Research the Sun:** How big is it? What is it made of? How far away it? What are solar flares? What elements are found in the sun? Why is the sun important for all life on earth?
- **Find out more about stars:** What types of stars are there? What is the life cycle of a star? What are nebulae? How far away is the nearest star? What are galaxies? What are constellations?

Below are a list of films and TV programmes on space that you might like to watch:

Space Films to watch:

- Contact (1997) PG
- Apollo 13 (1995) PG
- Avatar (2009) PG
- Interstellar (2014) PG
- The Martian (2015) PG
- Hidden Figures (2016) PG

Space programmes to watch:

- The planets on BBCiplayer (you need to have an account to watch but it is free to set up)
<https://www.bbc.co.uk/iplayer/episodes/p07922lr/the-planets>
- Cosmos a space-time odyssey with Neil Degrasse Tyson <https://watchdocumentaries.com/cosmos-a-spacetime-odyssey/> also on Netflix

Here are some links to websites that might help you with your project:

https://www.ducksters.com/science/physics/space_exploration_timeline.php

<https://www.nasa.gov/centers/glenn/about/history/timeline.html>

<https://www.sldirectory.com/studf/space.html>

<https://www.nasa.gov/kidsclub/index.html>

<https://www.explainthatstuff.com/spacerockets.html>

<https://spaceplace.nasa.gov/starfinder/en/>

<https://spaceplace.nasa.gov/menu/sun/>