

YEAR 6 SILVER WEDNESDAY ACTIVITY

British Science Week: Our Diverse Planet

British Science Week is an annual celebration of science, technology, engineering and maths (STEM), which lasts for a total of ten days. The celebration was first held in 1994 and was named Britain's National Science Week.

Since its beginning over 25 years ago, British Science Week has become one of the biggest national science celebrations. Each year, over one million people of all ages take part in enjoyable, challenging and engaging activities across the UK.

The event is led by the British Science Association and receives funding from the UKRI (UK Research and Innovation). This funding helps by providing grants to schools and communities who are less likely to have access to scientific projects. By supporting a variety of events across the nation, it is hoped that an interest in science will be sparked amongst the next generation, which may then encourage them to follow a career in science.

Annual Theme

Each year, British Science Week follows a theme which runs throughout all of their educational activities. The theme for this year's British Science Week is 'Our Diverse Planet'. This theme was chosen because diversity is a part of people, materials, nature or anything else found in children's everyday lives.

The British Science Association want children to think about the diversity in the world around them, including the diversity of STEM subjects and the variation in people's tastes and interests. While diversity can appear anywhere, the British Science Association has focused on subjects such as diverse places and diverse jobs.

Diverse Places

This year, British Science Week runs alongside an important scientific milestone: the 200th anniversary of the first recorded sighting of Antarctica. Since it was first spotted in January 1820, the continent of Antarctica has been the destination for many explorers and scientists who want to learn more about this incredible place. Antarctica is a diverse continent with a wide variety of animals including penguins, seals and albatrosses. These animals have all adapted to survive in the harsh, wintry environment.

To protect such an amazing and unspoilt place, over 50 countries have signed something called the Antarctic Treaty. This was written in 1959 and, alongside other things, states that Antarctica will only be used for peaceful purposes and that the continent will be dedicated to scientific research.



Although Antarctica attracts many tourists each year, the majority of people who spend prolonged periods of time on the continent are scientists, researchers and explorers. Most of the people who stay on the continent for a long time live in purpose-built places called research stations.

Diverse Jobs

As it is an area which is entirely dedicated to scientific research, Antarctica is hugely important and presents a huge diversity of job opportunities, a few of which are listed below.

Aircraft Engineers	These people are responsible for maintaining all aircraft used for research in Antarctica.
Atmospheric Scientists	These people use an exciting range of scientific tools to measure and observe changes to the atmosphere.
Marine Biologists	These scientists study all areas of marine wildlife including their diet, habitats and predators.
Mechanical and Electrical Engineers	These people provide support to scientific investigations by helping with projects, such as developing new instruments to measure the weather and even creating bridges which can weigh penguins!

Working in such a remote location brings many challenges, especially for those people who spend an extended amount of time working in Antarctica. Temperatures average -60°C at the highest points of the continent so research stations need to be well-equipped to deal with the challenges that the continent brings.

Designing a Research Station

Imagine that you are asked to design the latest research station to be built in Antarctica. What do you think are the most important things for you to consider in your design? Think carefully about:

- heating;
- the rooms which are needed;
- the materials which are needed;
- what people will do when they're not working.



NOW ANSWER THE FOLLOWING QUESTIONS, REMEMBER TO THINK ABOUT YOUR STRATEGIES, HAVE YOU PICKED THE TEXT APART? DO YOU UNDERSTAND WHAT THE QUESTION IS ASKING YOU? HAVE YOU CIRCLED THE QUESTION WORD AND UNDERLINED THE KEY WORDS?

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Questions

1. Which of the following words is **not** represented by the acronym STEM? Tick one.

- science
- technology
- engineering
- measurements

2. Draw four lines and complete each sentence.

Aircraft engineers...	might study the diet of marine wildlife.
Atmospheric scientists...	have created a bridge which weighs penguins.
Marine biologists...	are responsible for maintaining aircraft.
Mechanical engineers...	use tools to measure and observe changes.

3. Look at the paragraph beginning **This year, British Science...**

Find and copy one word which means the same as **event**.

4. Name one thing that the Antarctic Treaty states.

5. Why might you need to consider heating when designing a research station?

6. Out of the four jobs listed in the text, which would you **most like** to have? Explain your answer.

7. How do you think that the author has tried to inspire people to become scientists? Explain your answer.

8. **Antarctica attracts many tourists each year.**

Why do you think that people want to visit Antarctica? Explain your answer.

9. Do you think that the theme 'Our Diverse Planet' will make people excited about science? Fully explain your answer.
