

YEAR 6 GOLD WEDNESDAY ACTIVITY

British Science Week: Our Diverse Planet

Contrary to what its name might suggest, British Science Week is an annual celebration of science, technology, engineering and maths (STEM), which spans a total of ten days. The celebration was first held under the title of Britain's National Science Week in 1994.

Since its inaugural event 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 coordinated by the British Science Association, who, with funding from the UKRI (UK Research and Innovation), provide grants to schools and communities. These grants focus specifically on areas where people 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 encourage them to pursue a scientific career.

Annual Theme

Each year, British Science Week generates a specific theme which spans across all of their educational resources. 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.

Diversity is everywhere and the British Science Association want children to think about the diversity in the world around them, including the diversity of STEM subjects, the ways the towns and cities are built and the variation in people's tastes and interests. While diversity encompasses everything, the British Science Association has split their educational resources into different sections which include diverse places and diverse jobs.

Diverse Places

This year, British Science Week coincides with an important scientific milestone: the 200th anniversary of the first recorded sighting of Antarctica. Since it was first sighted by Edward Bransfield in January 1820, the continent of Antarctica has been the destination for many explorers and scientists who want to discover more about this incredible place. Antarctica is a diverse continent with a wide variety of animals including penguins, seals and



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albatrosses; all of whom have adapted to survive in the harsh, wintry environment.

Since 1959, over 50 countries have signed the Antarctic Treaty which protects Antarctica from being exploited for its wildlife or natural reserves. Sections of the treaty state that Antarctica will only be used for peaceful purposes and that the continent will be dedicated to scientific research.

As a result of its isolation from the rest of the world, Antarctica does not have an indigenous population. Although it attracts many tourists each year, the majority of people who spend a prolonged amount of time on the continent is largely made up of scientists, researchers and explorers. It is estimated that the population of Antarctica is between 1,000 and 5,000 people at any one time. The majority of people who stay on the continent for longer periods are stationed at research stations.

Diverse Jobs

Being an area which is dedicated solely to scientific research, Antarctica is hugely important and boasts a huge diversity of job opportunities. Below is a small selection of the jobs currently available in Antarctica.

Aircraft Engineers	These people are responsible for maintaining the 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 aspects of marine wildlife including their diet, habitats and predators.
Mechanical and Electrical Engineers	These people provide support to scientific investigations by aiding 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. With temperatures averaging -60°C at the highest points, research stations need to be well-equipped to deal with the challenges that the continent brings.

Designing a Research Station

Imagine that you are tasked with designing the latest research station to be built in Antarctica. What do you think are the most important elements for you to consider in your design? Think carefully about aspects, such as:

- 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?

Questions

1. Draw four lines and complete each sentence.

Edward Bransfield first spotted Antarctica...	a part of everything.
Diversity is...	in 1994.
British Science Week started...	in 1820.
Antarctica is...	a continent.

2. So far, how many countries have signed the Antarctic Treaty? Tick one.

- exactly 50
 under 50
 over 50
 over 60

3. Why does the author start the text with the phrase **Contrary to what its name might suggest...**?

4. Look at the paragraph beginning **As a result of its isolation...**
Find and copy one word which means the same as **native**.

5. What job is someone most likely to have if they study the diet of fish off the shore of Antarctica?

6. Do you think that every school should celebrate British Science Week? Fully explain your answer.

7. Do you think that this text will inspire people to pursue a career in science? Tick one.

yes no

Fully explain your answer.

8. Some countries have not yet signed the Antarctic Treaty.
Argue that all countries **should** be made to sign the Antarctic Treaty.

9. What impression does the author give you of working in Antarctica? Explain your answer fully using evidence from the text.

10. **...research stations need to be well-equipped to deal with the challenges that the continent brings.**

Describe some of the challenges that this sentence could be referring to.
