Polar Quest
2013-2015
ANTARCTIC GEOGRAPHY
START
HOW BIG IS ANTARCTICA (IN MILLIONS OF KM$^2$)?
Incorrect !

TRY AGAIN
Correct!

The area of Antarctica, including ice shelves and islands, is approximately 14 million km². This is equivalent to 1.4 times the area of the United States.
WHAT IS THE NAME OF THE ROCK RIDGE ON WHICH THE PRINCESS ELISABETH STATION IS BUILT?

- UTSTEINEN
- ROMNEUS
- NANSEN
- VESTAUGHEN
Incorrect!

TRY AGAIN
The **Princess Elisabeth Station** is anchored with short legs on the rocky Utsteinen ridge. This allows the snow to pass under the main building without accumulating. The main station building stays free of snow all year round.
WHAT IS THE ALTITUDE AT THE PRINCESS ELISABETH STATION?

Options:

- 323 m
- 694 m
- 1382 m
- 4810 m
Incorrect!

TRY AGAIN
Correct!

The Princess Elisabeth Station is located at an altitude of 1382 m.

Mount Vinson is the highest peak in Antarctica with an altitude of 4892 m.
WHICH OF THESE TYPES OF ICE IS NOT FORMED BY THE ACCUMULATION AND TRANSFORMATION OF SNOW LAYERS?

- SEA ICE
- ICEBERG
- GLACIER
- ICE SHELF
Incorrect!

TRY AGAIN
Correct!

Sea ice is formed from frozen sea water.

Glaciers and ice sheets are terrestrial ice formed by the compression of successive layers of snow. Glaciers and ice sheets can flow over the ocean to form ice shelves that gradually break off to produce icebergs.
IMAGINE YOU ARE IN ANGARCTICA AT THE END OF NOVEMBER. YOU ARE GETTING READY TO GO OUT ON AN EXPEDITION NEAR THE PRINCESS ELISABETH STATION. WHAT IS THE TEMPERATURE OUTSIDE?
Incorrect!

TRY AGAIN
The air temperature around the Princess Elisabeth station varies throughout the year from $-50 \, ^\circ\text{C}$ to $-5 \, ^\circ\text{C}$.

In November, it's the austral summer. In late November 2014, Roger Radoux, the winning teacher of the Polar Quest 2 competition who visited the station, said that it was about $-12 \, ^\circ\text{C}$ to $-15 \, ^\circ\text{C}$.
WHICH OF THESE ANIMALS DOES NOT LIVE IN ANTARCTICA?

- Emperor Penguin
- Weddell Seal
- Snow Petrel
- Polar Bear
Incorrect !
Correct!

Polar bears live in the Arctic, where they hunt seals on the ice during the winter. They are excellent swimmers, but none has managed to swim all the way to the coast of Antarctica... at least not yet!
WHICH ANIMALS CAN WE OBSERVE WITHIN 1 KM OF THE PRINCESS ELISABETH STATION?

- EMPEROR PENGUIN
- SNOW PETREL
- WEDDELL SEAL
- ALL THREE
Incorrect!

TRY AGAIN
Correct!

Near the station, there are snow petrels and skuas. Snow petrels feed in the ocean and nest on the mainland.

Penguins and seals live at the coast, 220 km from the Princess Elisabeth Station.
WHICH TERMS DESCRIBES A SMALL MOUNTAIN TOP PROJECTING FROM A GLACIER OR ICE SHEET?
Incorrect!

TRY AGAIN
Correct!

**Nunatak** is a rocky outcrop sticking out of the ice cap.

What do the other words mean?

**Ice sheet**
Vast expanses of ice in Greenland and Antarctica

**Polynya**
An area of open water surrounded by sea ice

**Ice Shelf**
Extension of ice sheet or glacier which is floating on the sea
In December at the Princess Elisabeth Station, how many hours of daylight are there in a day?

- 24 Hours
- 12 Hours
- 6 Hours
- 0 Hours
Incorrect!
Correct!

In December, it's the austral summer. There is 24/24 hour daylight.

During the austral winter (June), there is 24/24 hour darkness.
EACH YEAR, ANTARCTICA DAY MARKS THE SIGNING OF THE ANTARCTIC TREATY IN 1959. ON THIS OCCASION, MANY STUDENTS FROM ALL OVER THE WORLD DRAW FLAGS THAT ARE DISPLAYED IN ANTARCTICA. ON WHICH DATE IS ANTARCTICA DAY?
Incorrect !
Correct!

**Antarctica Day** celebrates the signing of the **Antarctic Treaty** on the 1\textsuperscript{st} December 1959.

The Treaty states that "it is in the interest of all mankind that Antarctica shall continue for ever to be used exclusively for peaceful purposes and shall not become the scene or object of international discord”.

Antarctica is a continent for peace and science.
Well Done!

You can now do this quiz again or visit [www.educapoles.org](http://www.educapoles.org) for other quizzes, teaching files and educational projects for the polar regions, polar science, climate change and sustainable energy.