

Polar Bear Project IDL week beginning 01.02.21.

*Second Level*

### **Activity 1 – The Arctic on a Map**

Have a look at the first page of this website. It shows how the Arctic looks on the globe and there is a video which explains which countries the Arctic encompasses.

[The Arctic | Wicked Weather Watch](#)

Here is a map of the most northerly town in the world, Ny-Ålesund:

[Ny-Ålesund - Google Maps](#)

Click to view it as a satellite picture and Street View. Have an explore! Ny-Ålesund has become a town because it is a research centre for several countries. Can you see the airstrip?

Now have a look at a map of Hollywood:

[Holywood Primary School - Google Maps](#)

**Task: Write down bullet points of the other things you can see from the satellite pictures on each map. What is the same? What is different?**

## **Activity 2 – How climate change is affecting the Arctic**

### **Task 1** [Climate Change \(arcticcentre.org\)](https://arcticcentre.org)

The article above tells us about climate change and how it is affecting the Arctic land, animals and people. The information has come from a university so it is quite tricky reading. There are 4 sections:

1. How is the Arctic region changing?
2. How will the Arctic nature cope with climate change?
3. Why is climate change talked about so much in the Arctic?
4. How will climate change affect the population?

Because it is quite tricky to read, I have summarised the first section here, in my own words in the blue box:

### *How is the Arctic region changing?*

The Arctic is changing in different ways, some changes are good, some are bad. Some are fast and big. It is changing because of things happening in other parts of the world. Other countries want to dig in the Arctic for natural resources like oil. Other countries want to travel to the Arctic for holidays. This can be good as it brings money to the Arctic people. People in other countries are contributing to climate change. This can affect nature. Many Arctic people have a job that relies on nature, so their jobs may be in danger. It is important that the changes do not damage nature as that can damage Arctic people's livelihoods.

**You have a really important task to help the younger children with their learning about climate change and the Arctic: Choose one of the other sections from the article and publish your summary of it on the blog.**

Just so you can see it as well, this is what I will be asking the younger children to look at:

[Climate change in the Arctic | Wicked Weather Watch](#)

**Or choose Task 2 –**

[Arctic Circle Map, clear, simple, incl. Global Warming Map \(bugbog.com\)](#)

Some people say climate change is not real. Read this article and see if you can give the other side of the debate, using evidence from this article. If you would like to extend your work, you can research more about climate change before you give your side of the debate.

### **Activity 3 – Visitors from the Arctic to Dumfries and Galloway**

In Dumfries and Galloway we have thousands of visitors that come to us from the Arctic Circle every year, late Autumn, and then they go back to the Arctic again in Spring. These are **barnacle geese**. WWT Caerlaverock has several thousand barnacle geese visitors, but unfortunately due to Covid they are temporarily closed. However, Faith Hillier, one of the officers at Caerlaverock has sent some information and resources just for Holywood Primary! Between us, Faith and I have some tasks for you. You don't have to do them all, but as Faith has given us some ideas I thought you could have a choice. **Read the information links below and then pick one or more tasks.**

<https://www.wwt.org.uk/wetland-centres/caerlaverock/news/2020/09/29/on-their-way/19349>

[The geese are arriving! | WWT](#)

**Task 1** – Look at the Word document on the blog, called “Barnacle Goose Migration.” Then try this quiz:

#### Barnacle Goose Migration Quiz

1. Where do barnacle geese migrate to in Summer?
2. How far do barnacle geese fly on their migration north?
3. How many barnacle geese were there on the Solway Firth in the late 1940s?
4. How heavy is a male barnacle goose?
5. What is the scientific name for a barnacle goose?
6. Which island do barnacle geese stop at on their migration south?
7. If the winds are favourable, how fast can they do their migration?
8. How is climate change affecting barnacle geese?
9. How much time do barnacle geese have to breed in Svalbard?
10. How do we study barnacle geese?

Will give answers on the blog next week!

**Task 2** – Make a goose lantern. See the picture below for reference. Use a balloon and either white paper, or recycled scrap paper to make the goose body from paper maché. Pop the balloon when dry and remove the balloon. Stick on paper/carboard legs, tail, neck and head. Use paint or pens to make yours a barnacle goose – how accurate can you be with the markings? You can put a torch into the body to make it glow. While you wait for the paper maché to dry: *On pieces of paper write down as many barnacle goose facts as you can and store them in the goose's body, or write them onto paper feathers to stick on the outside.*



**Task 3** - Before you make an origami goose, following the instructions on the link, *write all the facts you can about barnacle geese onto the paper that you will fold.*

[How to make Origami Goose - John Montroll \(HD\) - YouTube](#)

**Task 4** – If you are interested in how climate has affected the barnacle geese, read this article, then write a stream of consciousness, or role play, as if you were a barnacle goose flying home and finding that you need to go further because of the melting ice.

<https://www.wwt.org.uk/news/2019/09/03/wild-barnacle-geese-take-climate-action/17555>

**Bonus Task!** I have been imagining how much the geese need to eat to sustain them on such a long journey. They don't eat anything as they travel over water, but they stock up on agricultural crops and plants in salt marshes before their journey. I have not been able to find out how many calories a goose would need to keep it going. If it were a human, how many cheese sandwiches and bananas might it need? If anyone would like to research this and find me some answers, then bonus points will be awarded!!

## **Activity 4 - Going to School in the Arctic**

[Learning in the freezer | Schools | The Guardian](#)

Read the article above about the most northerly school in the world, at Longyearbarn, Svalbard. **Design a quiz with questions that ask about school life there.** Put it on the blog so we can have a go at your quiz.

Remember to put the answers at the end!

If you would like to see what Longyearbarn looks like, here is a webcam link for a few views of Longyearbarn:

[Spitsbergen Webcams - Spitsbergen | Svalbard \(spitsbergen-svalbard.com\)](#)

It is dark for almost 24 hours a day at this time of year in the Arctic Circle, so you won't be able to see as much as in the Summer. However, when I was checking that the webcam worked just now I was lucky enough to see some of the Northern Lights!