

# Photo Collection

Over time, a person changes. They get older, and look different as an adult, compared to when they were younger.







# Satellite Images and Information



This is a bushfire. These fires burn through areas such as woodland, bushes, grass and savannah. Fires of this type are hard to predict and control.

In places with hot, dry weather, like Australia, Greece, Africa and California, these fires are particularly common.







# Satellite Images and Information



As a floating mass of freshwater ice, an iceberg is formed when a large bit of glacier (which is a frozen river), breaks off into the ocean.

Icebergs are mostly found in the oceans around Antarctica and the Arctic.







# Satellite Images and Information





This is a landfill, an area of land that gets filled with people's rubbish.

In some places, the waste is buried in a hole in the ground. Sometimes it's on top of the ground. Some of them are so big, they can be seen from space.

In general, landfills can be a problem for the environment, and people's health. So they should only be used when the rubbish cannot be reused or recycled.









# Research Planning Sheet

# **Research Time!**

| What is your issue?   |  |
|---|--|
| What has caused this?   |  |
| What is the impact on the environment?  |  |
| What are some specific examples/events that occurred?                                     |  |
| Find some images that show change over a time period linked to your climate change issue. |  |

# **Presentation Time!**

Think of creative and interesting ways to present your findings?

Some ideas could be:

- Posters
- Infographics
- Diorama

Record a video or podcast

- News report
- Music video
- Animation
- Museum/gallery display

# **Extension/Challenge**

Find examples of improvement over time? (e.g. CO2 emissions during the COVID-19 pandemic) Think about/discuss/present ideas on how we could use this information to help initiate change?

# **Group Work**

You may want to assign members of your group a specific task to ensure everyone has a job to do.

### **The Researcher**

Key responsibility: Find the answers to the questions

### **The Presenter**

Key responsibility: Decide how the presentation will be shared and plan the presentation

### The Copywriter

<u>Key responsibility:</u> Produce and write the text for your presentation

### The Designer

Key responsibility: Design and prepare the visual work for your presentation



# Logo Lift Off at home



# Ice Caps Experiment

# Home friendly

This lesson has been designed to support the UK Space Agency's Logo Lift Off competition, which is the search for a logo that will go on the first ever rockets to be launched from the UK in 2022. Across all activities there is a focus on developing skills and improving understanding of the role of small satellites in monitoring and informing solutions to climate change. Children will need to show understanding of the role of small satellites in informing solutions to climate change in an entry to the Logo Lift Off competition. Watch this video to find out more about the competition!

# **Experiment Time!**

### You will need:

- Water
- Ruler
- Timer
- A large plastic or metal container
- Plastic Animals (or items to act as polar animals)

# Time Water level measurement Any other observations Image: Constraint of the servation of the serv

What to do:

caps

1. Freeze some water in ice trays or small

2. Stage a 'polar scene' in the plastic/metal

measurement in the table below.

the ice cap melted?)

tupperware containers. These will be your ice

container by adding a shallow layer of water, the

frozen ice caps, and the animals on the ice caps.

3. Measure the height of the water and record your

4. Over a 2 hour period as the ice melts, measure

the water level several times. Record the level

of water and what happens to the animals in the

table below (e.g. How much space do the animals have on the ice caps? What happened to them as

### Observations: What did you see?

### logoliftoff.org.uk

# Logo Lift Off at home



# Ice Caps Experiment

# Extension/Challenge

Using your knowledge of graphs, plot this data on a graph to show the change over time.

# **Evaluation and conclusion**

### Think about it

- What does this experiment help us to realise? What considerations should be made for the future?
- How did people notice ice caps were melting in the first place, do you think?
- See if you can find any satellite imagery that shows ice caps melting over time.

# Ready to design your Logo Lift Off entry?

Here's some questions to help.

- What have you learnt today that you might like to include as a logo design or symbol in your Logo Lift Off entry?
- Think about what logos you like, and what makes them memorable. How can you design your logo to be as memorable?
- You can design your logo however you like, drawn by hand or on a computer or device. Just make sure it's nice and clear!







