

Name:

Date:

## Adaptations & Habitats – Activity 7

# **Climate Change Experiment**

## **What is climate change?**

Climate change is a long-term change in our weather pattern. Humans have disrupted the Earth's natural climate with things like chopping down trees, using lots of vehicles and using lots of plastic products. The changes this has caused include things such as more or less rainfall than normal, more or less wind than normal, changes in sea currents and changes in temperature.

Climate change affects the Earth's habitats in several ways. Melting polar ice caps in the Arctic and Antarctic and increased sea levels are just some of the things that are happening due to climate change. This means that many animals are losing their homes and can't find food. It is happening so quickly that animals don't have time to adapt to the changes.

It can be hard to imagine this without seeing it in action, so let's do an experiment! Afterwards, see if you can think of ways in which we could reduce the effects of climate change.

## **Experiment:**

You will need...

- 4 ice cubes
- 4 plates or bowls
- A stopwatch

- Paper and a pen

You are going to place 4 ice cubes in 4 different locations in around and your home. Each location must have different environmental conditions such as different lighting and temperature. They could be in the fridge, on a sunny windowsill, outside in the garden, in a cool dark room or somewhere else. Decide on your 4 different locations, and then write down your hypothesis, or what you expect to happen.

### **Hypothesis:**

What do you think is going to happen to the ice cubes?

## **Method:**

- 1) Find 4 different locations with environmental conditions in and around your home.
- 2) Put an ice cube in each of the 4 plates or bowls, and get ready to place them down, one each in the 4 locations.
- 3) Get your stopwatch ready
- 4) Put the ice cubes in the 4 locations and press **START** on your stopwatch
- 5) Time how long it takes each ice cube to melt completely

## **Results:**

Time it took for the ice cubes to completely melt in each location.

Name of location:	Location 1:	Location 2:	Location 3:	Location 4:
Time:				

## **Analysis:**

What happened? Which melted quickest? Which took the longest time to melt?

**Conclusion:**

Was your hypothesis right or wrong? Why? What does this tell us about climate change and the effect it has on habitats like the Arctic and Antarctic?

## **How can I help?**

Can you think of any ways in which we can help reduce the effects of climate change? Write your ideas down here and let us know what you're going to do to help combat climate change!