The Environment: Climate Change

Aim:

To observe closely, using simple equipment by measuring the time taken for ice to melt in a comparative test.

I can measure the melting of ice in a comparative test.

To perform simple tests, by comparing the rate of ice melting in a comparative test.

I can perform a test and draw a conclusion.

Success Criteria:

I can measure and record the time taken for ice to melt.

I can compare two different measurements.

I can set up a simple comparative test.

I can draw a conclusion from the results of a comparative test.

Resources:

Lesson Pack

Building bricks

Deep trays- 2 per group (children's drawers are ideal)

Blocks of ice- 2 per group (these can be made by freezing water in food containers)

Cling film

Stopwatches- 2 per group

Keywords/New Words

Climate change, atmosphere, global warming, greenhouse gas, drought, flooding, hurricane, storm, sea level, sea ice.

Preparation:

Comparative Tests Activity Sheet - 1 per child

Climate Change Vocabulary Matching Activity Cards - as required

Climate Change Vocabulary Matching Activity Sheet - as required

Prior Learning: It will be helpful if children have previous experience of conducting comparative tests.

Learning Sequence



The Environment: Use the questions on the Lesson Presentation to prompt children to recall what they already know about the environment. Record keywords on a whiteboard or flipchart to assess prior knowledge.



Greenhouse Gas: Read through the information on the **Lesson Presentation** to explain the effect of greenhouse gases in simple terms.





Comparative Test: Organise children into groups of four or five. Children set up the comparative test by making two building brick houses and placing them into two trays to create mini environments. They then cover one of the environments in cling film to recreate the effect of greenhouses gases, before placing both mini environments in a sunny place. Children complete the **Comparative Test Activity Sheet** by writing a prediction, then using two stopwatches to record the time taken for the ice to melt in each tray so that no solid ice can be seen. When children have collected their results, they complete the **Activity Sheet** by writing a sentence to explain what they have observed.





Climate Change: Use the **Lesson Presentation** to explain the effects of climate change around the world, and the reasons why it is occurring.





Climate Change Vocabulary Activity: Children use the Climate Change Vocabulary Matching Activity Sheet, cutting out the definition cards and matching them to the vocabulary.





Children use the Climate Change Vocabulary Matching Cards to match the vocabulary and the definitions, working in a small group supported by an adult.



Children confer in pairs and complete their own copy of the Climate Change Vocabulary Activity Sheet.



Children work individually to complete their own copy of the Climate Change Vocabulary Matching Activity Sheet.



What Can We Do? With a partner, children generate ideas for helping to reduce the impact of climate change. Children give feed back to the rest of the class.

Taskit

Playit: Visit the _____ website for a selection of games and activities based around climate change.

Wordsearchit: Reinforce vocabulary with this _____

Imagine it: Use this ______ to stimulate discussion on the causes and effects of climate change.