

Willow Tree Academy - Year 4 - Going Green

Effects on Environment

- Melting glaciers and ice sheets could cause sea levels to rise.
- Melting sea ice is reducing polar habitats.
- Flooding of low-lying areas as a result of sea-levels rising rthis could lead to species extinctions due to habitat loss.
- Precipitation patterns are changing which will affect crop yields.
- Increased temperatures could lead to species extinctions.
- Increased sea temperatures cause coral bleaching, destroying their habitat.



Effects on People

- More extreme weather.
- Reduced crop yields could cause increased malnutrition.
- Melting ice could lead to flooding.
- Increased heat.
- New diseases and the migration of diseases to new areas.
- Water shortages could lead to political tensions.

Vocabulary

Climate Change - global warming as a result of human emissions and global changes to weather patterns.

Natural Hazards - naturally occurring physical phenomena.

Upcycling - creative reuse of unwanted materials and products.

Adaption - a change in structure, function or behaviour.

Mitigation - the action of reduction the severity or seriousness of something.

Orbital Changes - natural warming and cooling of the Earth caused by tilt variations.

Important Places

Amazon Rainforest
Antarctica
Arctic
Oceans
UK Seas and Rivers



Recycling - the action or process of converting waste into reusable material.

Big Question: How can we make the world better?

NUMERACY

Fractions
Decimals
Measures

Measures linked to STEM and statistics with science.
Data loggers used with electricity, measuring brightness of a bulb.

LITERACY

Stig of the Dump

Character Description of Stig - 2 weeks

Diary or Narrative - 2 weeks

Persuasion text. Children to persuade audience to switch to renewable energy following science investigation - 2 weeks

Half Term

Narrative - 3 weeks

Balanced Argument - Linked to Global Goals Should petrol & diesel cars be banned?

Explanation text - Water Cycle (If needed)

Poetry - Linked to saving the environment

ART

Pastels

Abstract rubbish/wrappers

Textile collage

Using real food items and magazine cut outs

Sculpting

Trash to treasure

DT/STEM

Design and make wind turbines linked to science electricity.

Make cars with K'nex and renewable energy, wind powered.

Create drums linked to recycling.

SCIENCE

Electricity

Identify common appliances that run on electricity construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers identify whether or not a lamp will light in a simple series circuit, based on whether or not the lamp is part of a complete loop with a battery recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit recognise some common conductors and insulators, and associate metals with being good conductors.

Make Wind Turbines as renewable energy

STEM: Making cars with renewable energy

Water Cycle

Recognise that light appears to travel in straight lines
Use the idea that light travels in straight lines to explain that objects are seen because they give out or reflect light into the eye

Explain that we see things because light travels from light sources to our eyes or from light sources to objects and then to our eyes

Use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them

Evaporation and condensation through animation

Plastic bag models of water cycle.

TOPIC:



Go Green

Links to Stig of the Dump & Floodland

YEAR 4 Spring Term

Visit: Recycling Centre

Local Visit: Litter Picking

PE

French

School & Weather linked to water cycle

PSHE

R.E. Christianity

What matters most
Code for living and rules
Non religious rules

P4C

Completed fortnightly |

Nemesis

Pops outdoor classroom

MUSIC

Djembe Drumming
Ukulele

Junk Drumming opportunities linked to Stig of the Dump/recycling.

ICT

I Can Animate linked to internet safety . Video for Film Festival.

Data Representation, Spreadsheets & Graphs linked to STEM

GEOGRAPHY

Locating Different Countries
Equators & hemispheres

Pollution linked to countries and statistics/ICT Spreadsheet & graphs