



Newsletter

13 Edition

Welcome to the latest edition of the St Peter's Green Team Newsletter!!!

We aim to bring you news about what we have been doing, facts and information about climate change, advice on what you can do to help, fun facts and good news stories. We hope you enjoy reading our newsletter and we can help you to think global and act local!

Ground Source Heat Pumps

By Callum Bailey

As a school we are getting a new ground source heat pump which replaces our old inefficient boiler. The DfE has made a commitment to keeping education at the forefront of sustainability. We have been learning lots about these heat pumps and through our newsletter we are sharing this information.

What is a ground source heat pump?

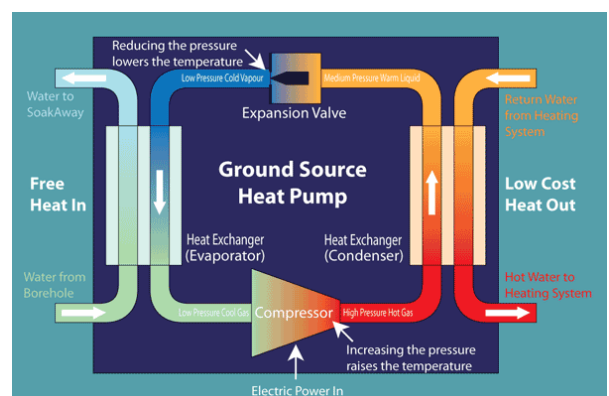
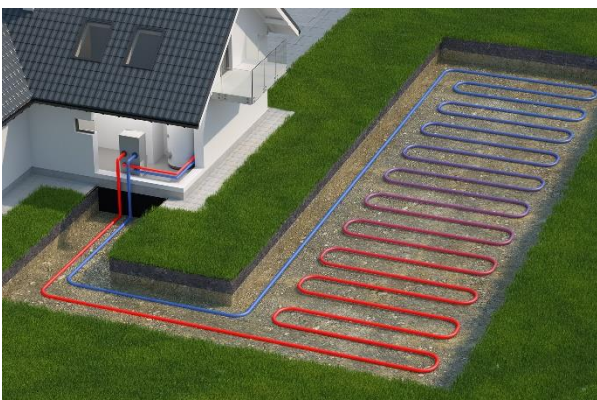
Ground to water heat pumps transfer heat from the ground outside a building to heat a building. It can also be used to heat water to be used in taps.

Thermal transfer fluid, sometimes known as brine, is a mixture of water and antifreeze that flows around a loop of pipe buried underground, it is either a long coil or loop.

Heat from the ground is absorbed into the brine which then passes through a heat pump. This raises the temperature of the fluid and then transfers heat to water. It works like a fridge in reverse. The fluid in our pump will be difluoromethane which has a low melting and boiling point. It exists as a gas at low temperatures. The output of our pumps will be 50-55°C.

Ground source heat pump benefits:

- Lower your energy bills which can save money.
- Reduces your overall energy use
- Cutting carbon emissions as they are a low carbon heating source.



Timmy the Turtle's Termly Top tip!

By Callum Bailey

In order to save money and the environment, you can grow your own fruit and vegetables as this decreases the need for artificial fertiliser and pesticides which can harm wildlife and it can reduce your carbon footprint.

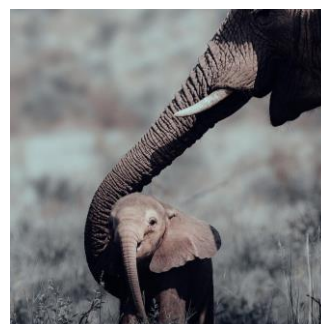


Fun Fact

By Miss Holliday

There are 3 species of elephants and you can tell them apart by their ears!!

African elephants have larger ears and they are shaped like the African continent, Asian elephant ears are shaped like the Indian subcontinent.



Frightening Fact

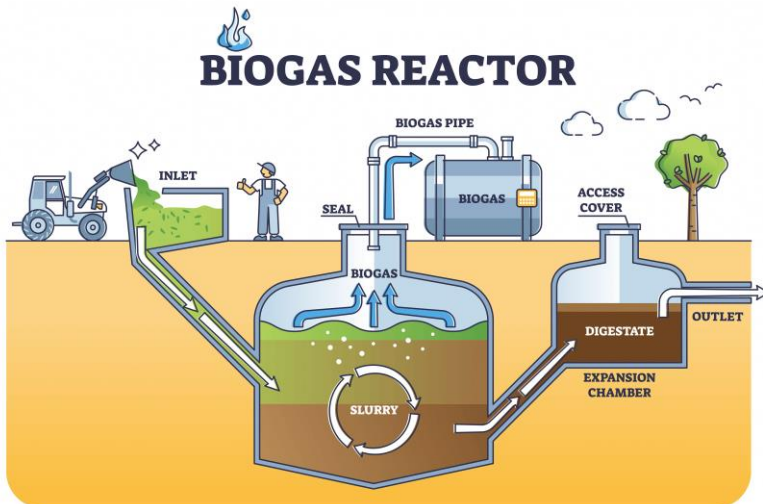
78% of marine mammals are at risk of choking on plastic.



Good News Story!

By Callum Bailey

France have implemented compulsory composting law, meaning all food scraps, vegetable peels, expired food and garden waste will be composted to replace chemical fertilisers or used to make biogas.



Impact of Climate change on elephants

By Magda and Lilly Yr. 8

We have spent some time looking at the impact of climate change on animals, in particular the elephants.

- ❖ Some species will struggle to find enough nutritious food to fit their existing guy biomes.
- ❖ There will be more frequent wildfires which destroy food sources and habitats.
- ❖ There will be longer period of drought reducing the amount of water available to the elephants.
- ❖ There could be mass migration as species move to find water and food.
- ❖ Elephants are endangered already.
- ❖ Their numbers have dropped from 12 million a century ago to 400,000 today.
- ❖ We need to reduce human and elephant conflict.

Single use plastics

By Green Team

No one is too small to make a difference – Greta Thunberg.

As we think about this quote from Greta, we did some research into single use plastics to try and understand them better and learn how to improve the situation. A summary of what we discovered is below.

- 5 R's
 - Refuse – say no to new items
 - Reduce - Reduce how often you replace items
 - Reuse - have reusable items instead of single use.
 - Recycle - chose items with recyclable packaging
 - Rot - compost as much as possible

- There are new bans and restrictions on polluting single use plastics as of 29th September 2023

- Switch from plastic bottles to metal reusable bottles.

- Countries that have banned single use plastic include
 - Kenya
 - Bangladesh
 - Zimbabwe
 - Columbia
 - Antigua
 - Chile

- Single use plastic ends up in landfill or in the environment – which causes harm to wildlife.

- England uses 2.7 billion items of plastic

- If 2.7 billion pieces of plastic cutlery were lined up, they would go around the world more than 8.5 times!!

- Half of the plastic made each year is single use.

- By 2050 there will be more plastic in the ocean than fish!!

- Many animals mistake plastic for food.

- Plastics have chemicals in them which are linked with serious health issues such as infertility and cancer.

- 1 person dies every 30seconds as a result of plastic waste.

Eco Calendar of events

- ✚ 3rd April - World Aquatic Animal Day
- ✚ 14th April – National Gardening Day
- ✚ 22nd April - Earth Day
- ✚ 24th April - Stop Food Waste Day