

# Varmints by Helen Ward

Tier 2 words: contaminate, produce, atmosphere, threat, seep, adverse, detrimental

Key vocabulary:

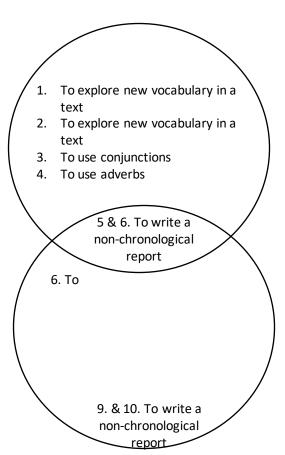
Pollution, litter, chemicals, habitats, cancer, recycle, factories, decay, organic, methane, global warming

# Varmints Non-Fiction – non– chronological report

SC:

Use subordinating conjunctions – because, although, unless, if Adverbials - however, therefore,

Technical language



- 1. Tier 2 words: contaminate, produce, destroy/destruction, atmosphere, threat, seep
- 2. Discuss what the pictures are showing land pollution. Key vocabulary lesson.
- 3. Fed in facts lesson: Land pollution. Conjunctions recap because to explain. Model use at start and middle of sentence. Teach although. Model use of although to show two pieces of contrasting information. Practice conjunctions with simple sentences.
- 4. Model use of however and therefore
- 5. Model use of non-chron map to retell report. E.g. First paragraph contaminate picture, litter picture, factory picture, farm picture. Second paragraph -
- 6. Write report about land pollution. Model use of bullet points where some bullet points have more than one sentence. Provide picture plan to support for each paragraph.
- 7. Continue land pollution report.
- 8. Write report about climate change

#### **Land Pollution**

# SC:

Use subordinating conjunctions – because, although, unless, if, because Adverbials - however, therefore,

# What is land pollution?

Land pollution is anything that damages or contaminates the land.

There are many types of land pollution:

- People litter. Although rubbish should be put in the bin, some people throw waste on the street or they drop it in public places.
- Factories and farms release waste. Because some of this is damaging chemicals, they pollute the land.

# **How is it affecting our planet?**

- Litter looks very unattractive. Therefore, it destroys the beauty of nature.
- Litter can hurt animals and their habitats because it can be poisonous for them. Therefore, it can make them very ill if they eat it.
- Chemicals from farms and factories can cause animals and plants to die. Because the harmful chemicals get into the soil and water, they can also cause cancers and skin problems for humans. However, there are now laws in the UK to prevent this type of pollution.

### What can you do to help?

You can reduce land pollution in different ways.

- You can produce less rubbish. For example, you could not use a napkin or paper towel unless you absolutely need one. You could also drink water from a cup rather than a plastic bottle. Therefore, you would use less plastic and make less waste.
- You can reuse things so that you are not throwing them away.
- You can recycle rubbish. This means your rubbish can be used to create something new. Therefore, the materials will not be wasted.
- You can pick up rubbish. If you help out by picking up waste when you see it lying around, you will help to keep the environment clean. However, make sure to ask your parents for help before you pick up strange rubbish.

#### **Land Pollution**

# What is land pollution?

Land pollution is anything that damages or contaminates the land.

There are many types of land pollution:

- People litter. Although rubbish should be put in the bin, some people throw waste on the street or they drop it in public places.
- Factories produce waste and some of this is damaging chemicals.
- Farming uses chemicals which get put on land. Animal waste can also pollute soil and eventually the water supply.

# How is it affecting our planet?

- Land pollution looks very unattractive. If you see rubbish outside of buildings or on the side of the road, it destroys the beauty of nature. This type of land pollution can hurt animals and their habitats because it can be poisonous.
- Farming and factories can allow for harmful chemicals to enter into the soil and water. These chemicals can cause animals and plants to die, disrupting the food chain. However, there are now laws in the UK to prevent this.
- Different kinds of land pollution have been known to have adverse affects on humans. Because the harmful chemicals get into the soil and water, they can cause cancers and skin problems.

# What can you do to help?

You can reduce land pollution in different ways.

- You can produce less rubbish. For example, you could not use a napkin or paper towel unless you absolutely need one and drink water from a cup rather than a plastic bottle.
- You can reuse things so that you are not throwing them away. Therefore, you will produce less landfill each year.
- You can recycle rubbish. This means your rubbish can be used to create something new. Therefore, the materials will not be wasted.
- You can pick up rubbish. If you help out by picking up waste when you see it lying around, you will help to keep the environment clean. However, make sure to ask your parents for help before you pick up strange rubbish.
- Use biodegradable products. If you use products that are made of organic substances, they will eventually decay and become a part of the environment.

#### SC:

Use subordinating conjunctions – because, although, unless, if Adverbials - however, therefore,

# What is climate change?

Climate change is also known as global warming and it is the process of our planet warming up. Unfortunately, humans have caused the Earth to warm up by approximately 1 degree.

Although this might not sound a lot, it affects people and wildlife all around the globe. Because global warming is changing the world's climate, we now experience unpredictable and severe weather such as bush fires.

### How it's affecting our planet

Climate change is detrimental to all life. A warmer climate could affect our planet in a number of ways such as shrinking ice caps, rising sea levels and more rainfall. Climate change is already affecting wildlife all over the world. However, certain animals are affected more than others. Polar animals such as the polar bear are more at risk due to their icy habitats melting. Another animal at risk is the sea turtle. They rely on nesting beaches to lay their eggs which have been affected by rising sea levels and the temperature of the water.

Because of climate change, more than 1 million species are at risk of extinction and by 2030 the worst impacts of climate change will be irreversible.

# Who is helping?

Greta Thunberg is a Swedish environmental activist, who is known for challenging world leaders to take immediate action to control climate change. In March 2019, climate campaigners across the world came together to co-ordinate the first global strike for global warming. Because of Greta Thunberg's action, more protests have taken place and she has inspired many students across the globe. Amazingly, world leaders, scientists and even the Pope have given her support. Moreprotests are planned for this September due to Greta's determination.

#### Key facts:

#### **Land pollution**

Land pollution is anything that damages or contaminates the land.

Littering – unattractive, destroys beauty of nature and habitats of animals

rubbish thrown away from homes – every household produces 1 tonne of rubbish per year => landfill site

Waste from factories goes into the ground

Some rubbish contains toxic chemicals that contaminate the soil and water

May then harm people who eat plants grown in this soil

Some rubbish contains toxic chemicals that contaminate water that flows into oceans

This is the reason why you should practice the 3 Rs: Reduce, Reuse and Recycle.

Different types of materials take different amounts of time to decay. Paper can decompose in around a month, but it takes a plastic bag over 20 years to decompose. Scientists predict that it could take a glass bottle about 1 million years to biodegrade and that some materials, like Styrobam, will never biodegrade.

#### <u>Air</u>

Unwanted chemicals, gases and particles enter atmosphere such as carbon dioxide

Most air pollution comes from burning fossil fuels. These include coal, oil, and natural gas. Factories, electrical plants, and automobiles burn these fuels for power. The burning of fossil fuels may release solid particles, such as ash and soot, into the air. This type of pollution may be seen in the form of smog over big cities. Smog-filled air is hazy, or hard to see through.

Some air pollution comes from transport like cars, trucks and aeroplanes. These vehicles use fossil fuels to power their engines.

Wildfires and volcanoes also cause some air pollution. It also may release harmful gases.

Air pollution may cause such diseases as cancer and asthma. Air pollution kills 7 million people worldwide every year

Air pollution also leads to acid rain, or polluted rain that can harm living things.

In addition, air pollution may be a cause of global warming, which is a steady rise in Earth's average temperature.

Finally, air pollution damages a part of the atmosphere called the ozone layer. The ozone layer is important because it protects Earth against harmful rays from the Sun.

#### **Pollution**

Pollution is one of the biggest killers, affecting more than 100 million worldwide. But what is pollution? Pollution can be described as the <u>contamination of air</u>, water, and soil because of a harmful substance, this is usually caused by humans. There are many different forms of pollution however this report is going to focus on the most common forms, land, air and water pollution.

#### Land

Land pollution is anything that damages or contaminates the land. There are many causes of land pollution from the rubbish wethrow away in our homes to waste produced at factories. Littering, or tossing rubbish on the ground is also a form of land pollution and as a consequence of this, the chemicals from the rubbish can contaminate the soil and eventually the groundwater we need for drinking. Shockingly, every household in the UK produces 1 tonne of rubbish per year! Most of this rubbish ends up in a landfill site, outside of buildings or on the side of the road, resulting in not only the beauty of nature being destroyed but the destruction of animal's habitats and plants.

# <u>Air</u>

Air pollution is when unwanted chemicals, gases and particles enter the air and the atmosphere, causing harm to animals and damaging the natural cycles of the Earth. Human activity is a major cause of air pollution, especially in large cities and is caused by things such as factories, cars, aeroplanes, chemicals and fumes from spray cans. As a result of this activity, air pollution kills 7 million people worldwide every year! Another leading cause of air pollution is fumes from petrol releasing unwanted gases such as carbon dioxide into the air. However, most air pollution comes from burning fossil fuels.

#### Water

Water pollution is when waste, chemicals, or other particles cause oceans, rivers or lakes to become harmful to the fish andanimals that need the water to survive. 700 different species of animals are believed to be severely threatened because of plastic pollution in the ocean and astonishingly, 2050 is the year experts think that plastic in the ocean will weigh more than the fish in the sea! Some causes of water pollution are easy to see, people dump rubbish and æwage into rivers, lakes and oceans.

However, a big cause of water pollution is due to chemicals used in farming. These chemicals seep into the ground and as a result may make the groundwater unfit to drink.

# Did you know?

Pollution is one of the main causes of asthma which affects 5.4 million people in the UK!