

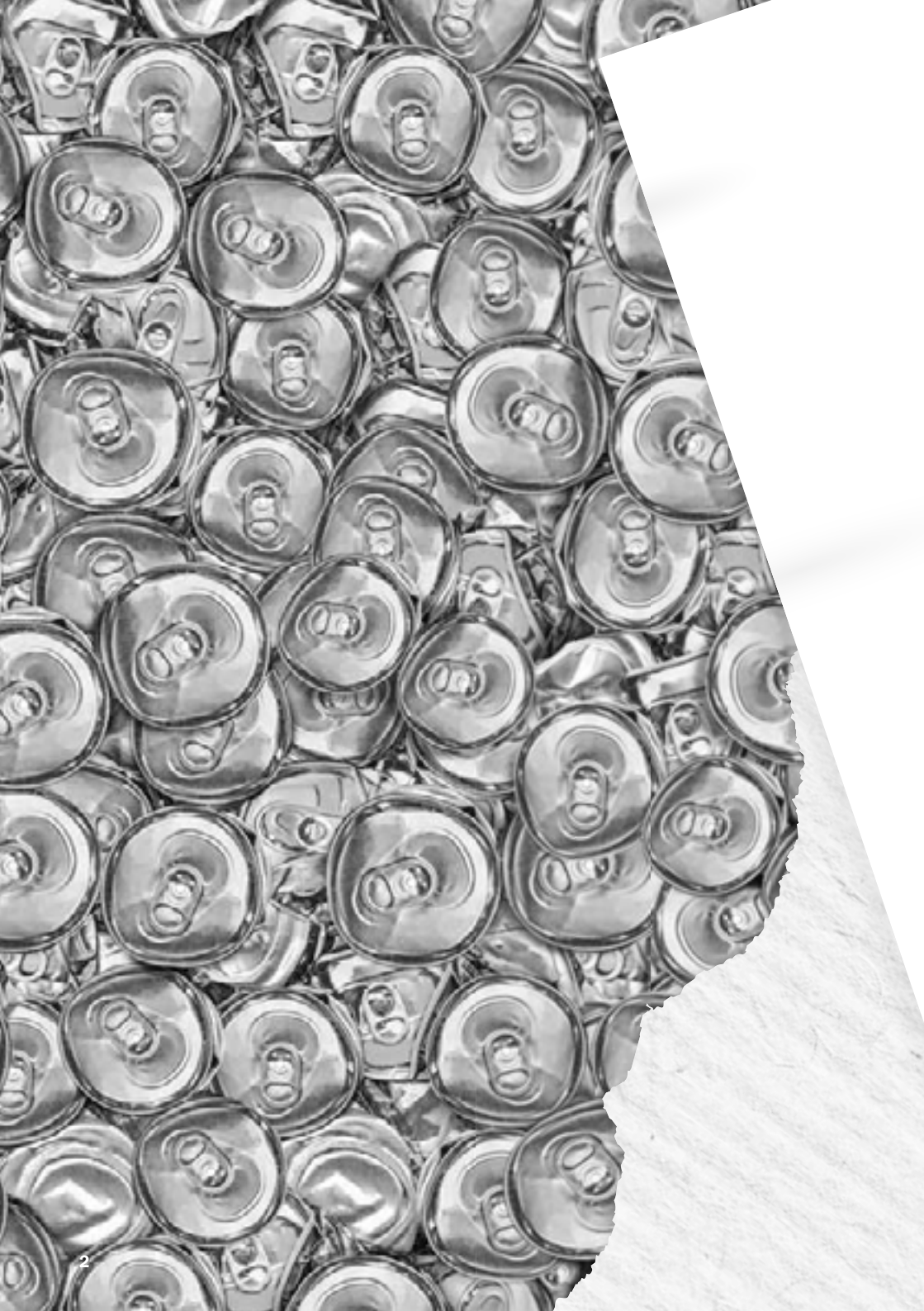
About *our* environment

Activity book



Name

Date



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Recycling

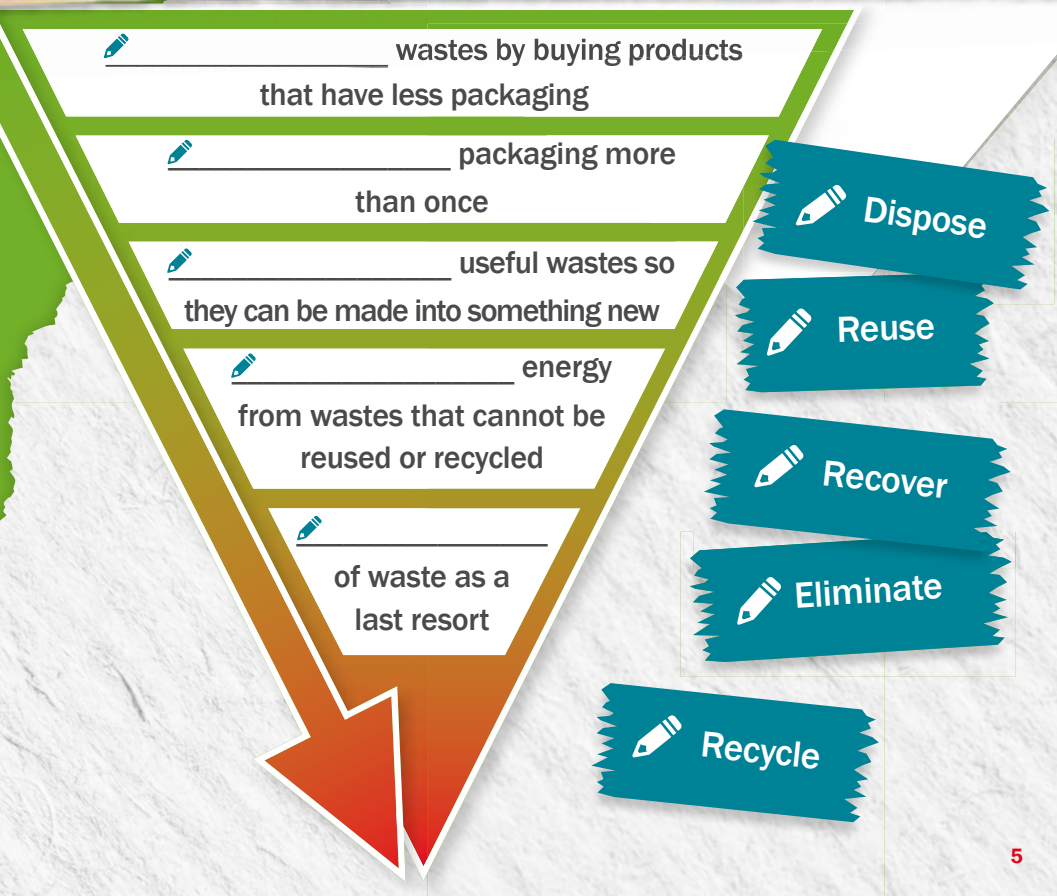


Fill in the blanks



Fill in the blanks using the words provided below.

Almost everything we buy is wrapped or contained within some kind of packaging. To prevent useful packaging wastes such as paper, cardboard, metals and plastics being taken to a landfill as rubbish, there are some simple guidelines we should follow. These guidelines are called the Waste Hierarchy and they help us prioritise how we manage wastes at home, school and work. Do you reuse and recycle your wastes at home and school?



Bright ideas

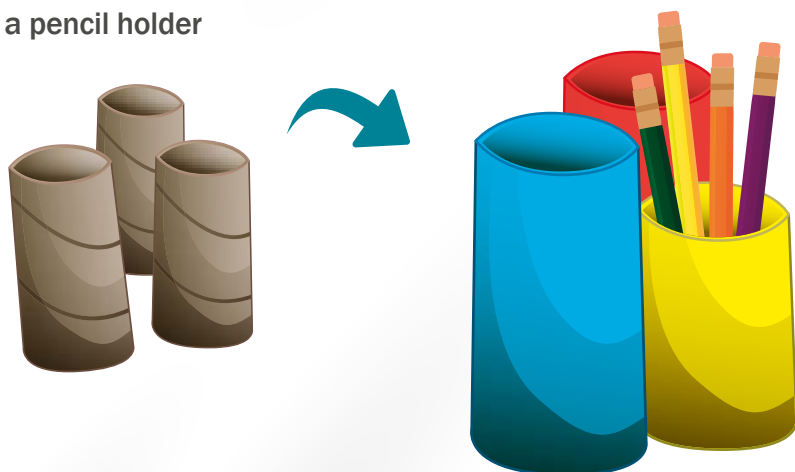


Ideas to reuse everyday waste materials in your home.

Turn a cereal box into a magazine holder



Turn toilet rolls into a pencil holder



Guess the words



Can you fill in the missing words?

Turn off _____  when you leave the room to save power.

Turn off the TV and _____  when you are finished with them to save power.

Turn off the tap when _____  to save water.

Use both sides or recycle _____  at home and school to help save trees.

Ride your _____  or _____  to school to help keep the air clean.



consoles



brushing teeth



paper



lights



walk



bike

Can you unscramble the following items that can be recycled into new things?

HLNCOTGI

C



OKBOS

B



PACTILS TLBOETS

P

B



LNMIUIUM NASC

A

C



Wordsearch



Can you find the words hidden below?

M B Q Q Q R N P C Y J Q T H E N P
N H A L K H R M A Q P R W N D T R
G L C T L B C E C P M W V O M C I
L M L H T W C L C E E I H L O V N
A W M L Y E O A T Y R R M N H D T
S A T Z L T R A R O C C X R T P E
S T T Q H F L I N D V L E C M X R
B E P E O T Z M E P B U I M N C C
O R S O I W E G F S S O B N W O A
T B D N L N M Z V E T P A C G F R
T O S C T B C O M P O S T R N F T
L T D N E W S P A P E R S W D E R
E T Q Y L D Z C O M I C S T M E I
S L D R I N K C A N S R M O Q C D
Z E H M A G A Z I N E S K Y Y U G
N S V T P F T Q D R T H Q S T P E
B V N R X G Z D R E D U C E Y S S

 Batteries

 Printer cartridges

 Environment

 Cardboard

 Food

 Glass bottles

 Clothes

 Recycling

 Reuse

 Reduce

 Coffee cups

 Metal tins

 Comics

 Newspapers

 Compost

 Toys

 Magazines

 Water bottles

 Drink cans

 Wood

 Paper

Global issues



Climate change



When scientists talk about climate change, they are usually referring to a build-up of man-made gases such as carbon dioxide and methane in the Earth's atmosphere that trap the Sun's heat similar to the glass in a greenhouse. The build-up of these 'greenhouse' gases have caused changes in weather patterns around the world. In recent years there have been many extreme weather events including, storms, flooding and, of course, the melting of glaciers and the polar ice caps due to higher temperatures.

Greenhouse gases can occur naturally, but our use of fossil fuels (fuels formed underground over millions of years) like coal and oil has increased the volume of these gases in the Earth's atmosphere to levels that are now causing harm. To prevent this problem getting worse, governments from around the world are taking steps to reduce our use of energy from fossil fuels.



Changes to habitats

- Melting ice caps.
- Water level changes for amphibians and reptiles.
- Damage to forest and woodland areas.



Warmer oceans

- Lead to strong storms.
- Greater evaporation and change in habitats. to local species.



Warmer climate

- Leads to melting of the ice caps, which causes. loss of habitats and rising sea levels.
- Increased risk of woodland/bush fires.

Colouring-in activity pages

Colour-in the environmentally friendly activities and sources of renewable energy.





Deforestation and other problems



Deforestation

The Earth's forests are very important to all living things on the planet, including us. They absorb enormous amounts of carbon dioxide, which is a gas that causes climate change, and they are also home to millions of species of animals, plants and insects. Unfortunately every day large areas of forest are cleared to make way for farms, roads and new settlements. This 'deforestation' is very harmful to the environment and is leading to the destruction of habitats and the species that rely upon them.

Overfishing and bycatch

Large nets are sometimes used to catch fish for us to eat. Overfishing occurs when too many fish are caught and removed from our oceans, lakes and rivers. Scientists believe that overfishing can be very harmful to other animals and plants that also live in or near the affected areas.

The term bycatch is used to describe unwanted fish and other animals that get caught accidentally. Sadly every year many dolphins, porpoises, turtles and sharks die after getting accidentally tangled in nets.

Water scarcity

Did you know that 663 million people do not have access to safe water? Water is needed for so much more than just drinking. We also need water for sanitation (washing and toilets), farming, cooking and manufacturing.

Illegal wildlife trading

Many species of wild animals are killed by poachers to sell parts of them such as their tusks or fur. Lions, elephants and rhinos are all at risk of becoming extinct within your lifetime!

Complete the words



Can you complete the words to find out which environmental issues are damaging the earth?

C _ I _ A _ E C _ A _ G _ 

W _ _ E R S _ A R _ _ T _ 

I _ L _ G _ L W _ _ D L I _ E 

D _ _ O _ _ S _ _ T I _ N 

O _ _ R F _ _ H I _ G 

Fact sheet

- It is believed that three rhinos a day are poached in Africa and only 3,200 tigers are left living in the wild.
- The Amazon rainforest is the world's biggest rainforest and it is home to over 5 million species of animals, plants and insects.

For more information, visit the World Wildlife Foundation at www.wwf.org.uk

Energy



What is energy?



Everything we do requires energy. We need energy to walk, to play and to study. We also need energy to keep us warm and power the lights and computers at home and in our schools.

Energy cannot be destroyed, it can only change form. Below are some examples of different types of energy:

Kinetic - Anything that moves has this kind of energy. Kinetic energy generated by the wind and the movement of waves in the sea can be used to produce electricity.

Thermal - We generate this form of energy when we exercise. Many forms of fossil fuels are burnt to produce thermal energy in order to generate power.

Radiant - Radiant energy means light. Light from the Sun helps plants grow. This is known as photosynthesis. Radiant energy can also be used to generate electricity.

Chemical - Our bodies create this kind of energy when we eat.

Sound - We produce sound energy when we talk or play an instrument.

It isn't always possible to choose whether the energy we use at home, school and work is from renewable sources. However, there are some simple things that we can all do to combat climate change. These include:

- Turning off lights and heaters in rooms that we are not using.
- Not leaving televisions, games consoles, computers and other electrical devices on standby.
- Replacing old electrical appliances when they go wrong with newer, more efficient models.
- Using our cars less by walking, cycling or using trains and buses more often.

For more great ideas, puzzles and information please visit www.childrensuniversity.manchester.ac.uk

Renewable or non-renewable sources of energy



Energy can be produced by renewable and non-renewable means. Non-renewable uses fuel that is in limited supply and cannot be replaced.

Sources of energy that never run out, like solar energy from the sun, are called renewable. These tend to be better for the environment and help us combat climate change.

Put a smiley face next to the renewable types of energy and a sad face next to the non-renewable.



Solar power



Nuclear power



Tidal power



Wind power



Coal

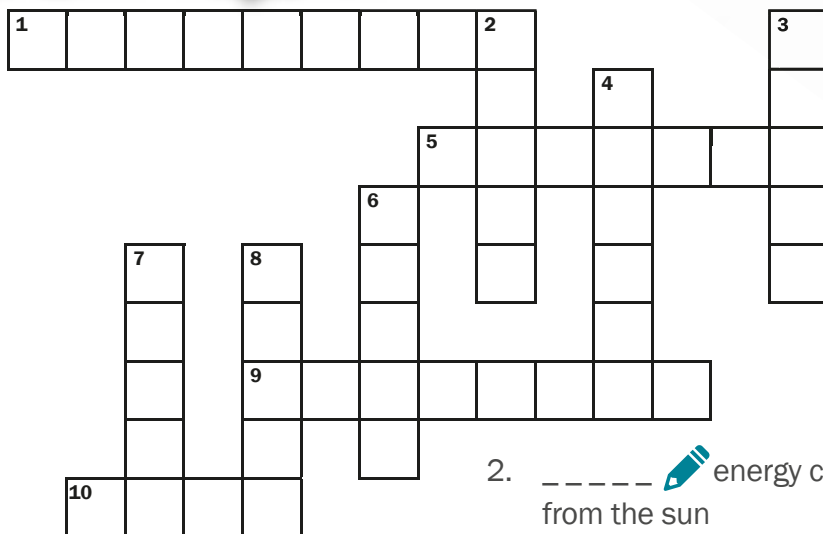


Natural gas











Crossword challenge

Using what you have learnt from the last two sections of this Environmental Activity Book, can you work out the clues to complete the crossword challenge?



Clues

1. These animals are hunted for their tusks
2. _____  energy comes from the sun
3. Deforestation is cutting down of _____ 
4. The world's biggest rainforest is the _____ 
5. _____  change is melting the ice-caps
6. Walk, get the bus or _____  to school reduces our greenhouse gas emissions
9. These animals are often captured accidentally in fisherman's nets
7. This animal is hunted for its horns _____ 
10. _____  is a fossil fuel that is mined from the ground
8. _____  power comes from flowing water

Biodiversity



About Biodiversity



Biodiversity describes all the different species of animals and plants on earth and their habitats. As discussed earlier in the booklet, climate change is affecting biodiversity.

Scientists have discovered 87 million species of plants and animals on our planet! However, more species are being discovered all of the time.

Many species are dependant on each other to live.

If the environment is damaged, the delicate balance of life is disrupted, which can often cause harm to other plant, insect and animal species – it can even affect us!

Before we build somewhere we always consider the animals and plants that already live there.

To safeguard the environment, Kier do the following:



Use site surveys to understand what animals, plants and insects need to be protected.



Help preserve and improve biodiversity by planting trees and creating homes for bats, birds and other creatures.



Work around certain seasons so that birds' nests are not disturbed.



Use sustainable timber from carefully managed forests.

Guess the habitat

Can you match the animal to its usual habitat?





Zebra



Whale



Polar Bear



Fish



Lion



Penguin



Fun activities

For rainy days...



Just because it's raining outside, doesn't mean you can't have fun!

Follow the link below to download a guide on how to make a fabulous gorilla mask out of waste packaging.

http://greenambassadors.org.uk/wp-content/uploads/2016/09/Gorilla_Mask.pdf

Build a castle

Using recyclable materials such as toilet roll holders and plastic bottles.

Work out your families carbon footprint

Go to www.footprint.wwf.org.uk and see how your family impacts on the environment.

For sunny days...



Nature walks

Go for a walk in a local park or nature area and make a note of how many different species of plants and animals you can see. Keep a chart and see how they change over time as they grow.

Grow your own vegetables

Ask your parents for a small area in your garden to grow your own vegetables or herbs. Use recycled food waste to create compost to really see those crops grow!

www.nhs.uk/Livewell/5ADAY/Pages/Growfruitandveg.aspx

Help the hedgehogs

Ask your parents to help make a hedgehog sanctuary in your garden!

www.hedgehogstreet.org

[illegible]



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