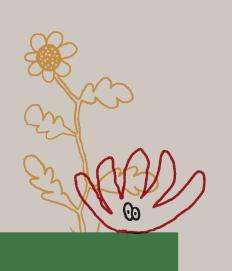
# THINKING KIT

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What is Nature?

What are Eco-systems?

Who owns the land?

How do we take care of it?

How do we grow what we need?









Exploring ideas

using some of the foundation concepts of

not only where we live — it is how we live"

Robin Wall Kimmerer Braiding Sweetgrass

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# Think Books

This THINK BOOK is stuffed full of information and ideas about being alive now as well as possibilities for the future.

We invite you to explore the information, discuss ideas, follow one of the CREATIVE PATHWAYS in the ACTION BOOK and share your journey with each other.

This is not meant to be read like a book but looked into like a pond.

It is about inspiring imagination, creativity and critical thinking.

It's not about doing; it's about being. The doing will come easily.

# THE GREAT IMAGINING?

... is a platform and an invitation to imagine and take action towards a greener, fairer, wiser future.

How to feel, as well as how to think What do the ideas on these pages make you think about?

How do they make you feel? What conversations do they inspire?



# Are you a teacher?

... a university course leader or a community workshop leader ... or are you just curious? We have guides to support you to work with your students on this THINK BOOK and to follow the CREATIVE PATHWAYS. We are there to support you in your journey, so any questions please email schools@thegreatimagining.org

# Thought experiments

Use these What if? questions to explore a greener, fairer, wiser future.

# Beautiful questions

To inspire our collective imagination, we need to ask more beautiful questions.

Instead of aahh, what's it all for? ask a question like: What does a hedgehog feel it means to be alive?

# Using our collective imagination

If we all work together to imagine a greener, fairer, wiser future we can take action towards that future.

So please give us your ideas and feedback.

# 10% More of the good stuff 10% Less of the bad stuff

The challenge is to take steps and actions towards more of the good stuff and in doing so start to understand what that means.

... at the same time as reducing the bad stuff and getting a sense of how that can help each of us as well as our friends and family and our planet.

These THINK BOOKS (and associated ACTION BOOKS) will give tips and ideas on how to do this.

"The web of life is calling us forth at this time. We've come a long way and are here to play our part. With Active Hope we realize that there are adventures in store, strengths to discover, and comrades to link arms with. Active Hope is a readiness to discover the strengths in ourselves and in others; a readiness to discover the reasons for hope"

Joanna Macy (activist, scholar of systems thinking and deep ecology)

# MORE INFORMATION

www.thegreatimagining.studio

# **GREAT IMAGINING** [Staffordshire]

# What is land?

Land is the solid part of Earth where we live, play, and build things. It includes mountains, valleys, forests, and deserts. Land is where we grow food, build houses, and find many animals and plants. It's one of the three parts of Earth, along with air and water!

# Flora

... means all the plants in a certain area, like flowers, trees, and grass. The word helps us talk about the different kinds of plants in forests, gardens, or even the whole world.

Flora is important because plants help make oxygen, food, and homes for animals!

# Fauna

... means all the animals in a certain place, like birds, fish, and mammals. The word helps us talk about all the living creatures in forests, oceans, or on land.

Fauna is important because animals help balance nature, spread seeds, and keep ecosystems healthy!

# Seasons

... are the four parts of the year:









Because the Earth tilts on its axis as it orbits the sun, the Sun shines from different distance and angles during the year.

In Summer, it's hot, and in winter, it's cold. Seasons change the weather, how plants grow, and what animals do.

# Soil

... is the soft ground we walk on – a magical blanket that covers the entire planet.

It's made of tiny bits of rock, old plants, and animals as well as microorganisms.

Plants grow in soil because it holds water and nutrients, like vitamins.

# The Soil Biome

... is the world of tiny living things under 'the ground. It's full of bugs, worms, fungi, and tiny creatures you can't see.



# BEAUTIFUL OUESTION

What if nothing ever died?

# Decomposition

... is when dead plants, animals, or food break down into smaller parts.

Tiny creatures like bugs, fungi, and bacteria help this process. They turn what's dead into things that help new plants grow. It's like nature's way of recycling: everything gets used again.

# FUTURE JOBS

Botanist, Zoologist, Entomologist, Ecologist

# Fungi

... are special living things, like mushrooms, mold, and yeast, that are neither plants nor animals. They grow in damp, dark places, like forests, soil, and on rotting plants.

Fungi are very important to the environment because they help break down dead plants and animals, turning them into nutrients for the soil. Without fungi, the earth would be full of dead things, and plants wouldn't have enough nutrients to grow.

Some fungi also help plants by growing on their roots, giving them extra food and water. So, fungi help keep nature clean and healthy!

# THOUGHT EXPERIMENT

Think about all the ways that fungi and mushrooms play a part in our Cycles of Life.

# "The earth is what we all have in common."

Wendell Berry (farmer, poet, environmentalist)

# 10% MORE OF THE GOOD STUFF

Take care of some plants everyday as if they were pets

# 10% LESS OF THE BAD STUFF

Try to waste less food and put all food scraps in the compost bin. if you don't have a compost find out how to make one.



# What is Nature?

Nature is all around us. It's the sky, the sun, the rain, the trees, the animals, and even tiny bugs and flowers. It also includes the oceans, rocks, minerals

and mountains – everything in the world that grows or exists naturally.

Nature isn't made by people – it's everything the Earth gives us on its own. The ocean, mountains, forests, and deserts are all part of nature.

Nature is the systems that connect everything and enable life to flourish such as weather, rivers, and ecosystems.

Nature helps us live by giving us clean air to breathe, water to drink, and food to eat. Animals and plants live in nature, and they all have special jobs to help keep the Earth healthy. When we take care of nature, it takes care of us!

# THOUGHT EXPERIMENT

What else do we owe to nature?

# The food chain

... shows who eats what in nature. Plants make food from sunlight. Small animals eat the plants. Bigger animals eat the smaller ones. This keeps nature in balance.

Each animal is part of the chain. If one part is missing, the whole chain can break.

# BEAUTIFUL OUESTION

What if ... plants could grow faster than animals could eat them for one week per year.

# The cycle of life

... is the way all living things grow, evolve, and start over again.

It begins with birth – a baby, animal, plant, or invertebrate is born from a seed or an egg. As it grows, it learns, eats, and plays. Then it becomes an adult and might have babies of its own. Over time, it gets older, and one day, it dies.

But life doesn't stop – new babies are born, and the cycle starts again. Even when something dies, it helps the earth by giving food or space to new life. This big circle keeps nature going and connects all living things.

# BEAUTIFUL QUESTION

What if ... nothing ever died?



A living being is something that eats, grows, moves, breathes, and can have babies. It could be a person, animal, plant, or even tiny germs. Living beings need food, water, and air. They change over time and can feel things. If it's alive, it's a living being. [[meaning]ess??]]



So, for example, animals are creatures that move, breathe, and need food and water to live. They can be small like insects or big like elephants. Animals play an important role in ecosystems.

# Kingdoms

... are large related groups of living beings.

Animals: from tiny ants to big whales! They move, eat food, and can feel things.

**Plants**: trees, flowers, grass – they stay in one place and make food from sunlight.

Fungi: mushrooms, molds, and yeasts. They don't make food – they break down dead stuff.



**Protists** are tiny living things, like algae or amoebas, mostly found

Bacteria (Eubacteria) are super-tiny creatures that live everywhere – even in your tummy or the soil!

**Archaea** (Archaebacteria): These are tiny like bacteria, but live in really crazy places like hot springs and salty lakes.

# FUTURE JOBS

**Ecologist** 

# 10% MORE OF THE GOOD STUFF

Spend more time in nature, looking at the wonder of nature

# 10% LESS OF THE BAD STUFF

Help take care of nature so it can thrive without the bad stuff we do to it.



# Nature that is not alive

Minerals are tiny building blocks made by the Earth – like shiny crystals or the salt on your chips! They've been around for millions of years and help make up mountains, beaches, and even the ground we walk on. So yes - just like animals, plants, and rivers, rocks and minerals are natural wonders too.

# Mountains

... are tall, rocky landforms that reach high into the sky. They affect the weather and provide habitats for plants and animals.

Mountains also support rivers and lakes, and they are important for water supply.

# BEAUTIFUL OUESTION

Imagine if mountains were alive. What would they think and feel?

# THOUGHT EXPERIMENT

We know mountains can move because the world looked very different in the past.

Imagine time speeded up and what it looked like for mountains to be born.

# What are minerals made of?

They are made from tiny things called elements, like oxygen or iron. Some even come from onceliving stuff, like shells!

Rocks are made from one or more minerals. Some come from lava from deep within the ground, others from sand or heat and pressure. Rocks and minerals make Earth's land and mountains.

# Minerals and rocks

Geology is the study of the Earth, including rocks, mountains, and the layers underground.

Geologists learn about how Earth was formed, how it changes over time, and what's inside it. They help us understand things like earthquakes, volcanoes, and where to find valuable resources.

# THOUGHT EXPERIMENT

Think about the layers of earth and rock beneath you all the way to the molten magma at the centre of the earth.





... are special elements used in phones, computers, electric cars, and wind turbines.

They help make things work better. But digging them up can hurt nature by causing pollution and wasting water. That's why recycling and using them carefully helps protect animals, plants, and our planet.

# Social injustice of mining

Mining can harm people, especially poor or Indigenous communities.

Companies sometimes take and damage land without asking, and pollute water and food without fair pay or support. That's called social injustice – it's when things aren't fair and people's lives are harmed.

# BEAUTIFUL OUESTION

Who should benefit from minerals extracted from the ground?

# Inert nature

*Inert* means something doesn't move, change, or react easily. Gases like helium or things like sand are inert because they don't mix or cause combine with other elements in chemical reactions.

They're quiet, calm parts of nature that just be, while other things grow, burn, or change around them.

# Something sacred

... is very special and deeply respected

It might be a place, object, or idea that people believe is connected to something greater, like nature, life, or a god.

People treat sacred things with care, love, and kindness because they feel they are important and full of meaning.

# FUTURE JOBS

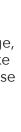
Geologist, Dry stone waller

# 10% MORE OF THE GOOD STUFF

Treat everything as precious and sacred. Find out about social injustice of land and mining.

# 10% LESS OF THE BAD STUFF

Treat everything with respect and dont waste stuff.



# What are plants?

Plants are living things that mostly grow in soil. They take in sunlight and water to make their own food and give us oxygen to breathe. Plants also provide food and shelter for animals as well as humans.

# Transpiration

... is how plants 'sweat' through their leaves.

Water from the roots travels up the plant and out through tiny holes in the leaves as water vapour. This helps keep plants cool and moves water into the air. It's part of how rain and clouds are made too.

# The Water Cycle

... moves water around Earth.

First, the sun heats water in rivers or oceans. and it turns into vapour (evaporation). Then it forms clouds (condensation). Next, it falls as rain or snow (precipitation). Finally, it flows back to rivers and oceans (collection) – then starts again!

# THOUGHT EXPERIMENT

Think about a droplet of water as it goes through the water cycle including going through your own breathing, your lungs, your blood and back out again. Perhaps do a drawing about this or a write about it or create a dance.

# How do plants breathe?

Plants have tiny holes in their leaves called stomata. They breathe in carbon dioxide  $(CO_2)$ and breathe out oxygen – which we need to

In the daytime, they use sunlight, water, and air to make food. This is called **photosynthesis**. At night, plants breathe a little oxygen too, just like we do!

# THOUGHT EXPERIMENT

Imagine being a plant and what it would feel like to be alive. Maybe you could create a drawing, painting, sculpture or dance that feels like you are the plant?

# Photosynthesis

... is how plants make their food. They use sunlight, water, and carbon dioxide from the air. With these, they make sugar to grow and release oxygen for us to breathe.

It's like plants cooking with sunshine: making food for themselves and clean air for everyone.

# LIBRARY

The Secret Life of Plants: A Fascinating Account of the Physical, Emotional, and Spiritual Relations Between Plants and Man by Peter Tompkins and Christopher Bird.

# BEAUTIFUL QUESTION

What if plants had feelings too?

# Irees

... are large plants with trunks, branches, and leaves. They help clean the air and provide habitats for animals.

They also help prevent soil erosion and give us fruit and wood.

# BEAUTIFUL QUESTION

Imagine ... being a tree that lives for several hundred years. Would time feel different to you?

# FUTURE JOBS

Botanist, Gardener, Horticulturalist

# 10% MORE OF THE GOOD STUFF

See how many different plants you can spot in your neighbourhood. see how many different kinds of plants you can eat everyday.

# 10% LESS OF THE BAD STUFF

Do less things to harm plants like using chemicals which go into the water system.

# Extraordinary Nature

Human imagination can never be as extraordinary as the species that exist in nature. Every kind of rainbow of colours. smells, shapes, forms and



behaviours are somewhere in the world.

# BEAUTIFUL OUESTION

What if... we all fell in love with nature as much as we have with the human made world?



# Mushrooms

Whether it's understanding the medical use of mushrooms, seeking biodegradable alternatives to polystyrene, or the power of mycelium networks, the potential of fungi is only just being discovered.

# PEOPLE WE ADMIRE

Paul Stamets is a mushroom expert who loves fungi! He studies how mushrooms can help people, plants, and even clean the Earth. He believes fungi are super-important for life.

Paul writes books, gives talks, and helps others see how amazing and powerful mushrooms are سلالمد in nature's big team!

# Methanotrophs bacteria

... are super tiny creatures that live in places like soil, wetlands, lakes, and even landfills.

They eat a gas called methane, which can make the Earth too warm. By eating methane, they help clean the air and keep the planet cooler and safer for plants, animals, and people.

Climate Scientists study them because they do an important job of helping to stop too much methane from getting into the atmosphere and causing climate change!

# THOUGHT EXPERIMENT

Apart from humans and Methanotrophs what other animals could make a big contribution to helping rebalance the climate on the planet.

# Slime molds

... are super cool, wiggly blobs that aren't animals, plants, or fungi – they're their own thing!

They move slowly, find the fastest path to food, and even solve puzzles!



They don't have a brain, but they can still learn and remember. Nature made them really strangely intelligent!

# THOUGHT EXPERIMENT

Find out more about slime molds and how they are used in technology and logistics. See if you can think of other ways they could be useful in your world.

# Cryptozoology

... is the study of animals that people think might be real, but no one has proven yet. Like **Bigfoot**, the **Loch Ness Monster**, or giant sea creatures!

Scientists called *cryptozoologists* look for clues, stories, and maybe even proof. It's like being a nature detective for mystery animals!

# THOUGHT EXPERIMENT

Invent the most incredible creature you can think of and then see if you can find something similar that exists in nature.

# Pollination

Flowers attract insects through their fragrance and spectacular colourful petals. They make sweet, nutritious nectar to attract insects and other small creatures like hummingbirds.

Pollen, a yellow powder from the male flower, gets dusted onto the insects legs and body to be transferred to another female flower and fertilise the seeds. This helps propagate new plants from seeds later in the season.

# 10% MORE OF THE GOOD STUFF

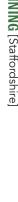
Every day discover one more animal, insect or weed that you haven't known about before.

# 10% LESS OF THE BAD STUFF

Discover things in the real world rather than the virtual world.

"We are showered every day with gifts, but they are not meant for us to keep. Their life is in their movement, passing from hand to hand, shared from person to person."

Robin Wall Kimmerer (Potawatomi botanist, author of Braiding Sweetgrass)



# Humans and Nature

Humans are part of Nature. How can we learn from nature to be greener, fairer and wiser? Nature is powerful and can rebalance itself and create healthy, thriving ecosystems. How can we be more like nature?

# THOUGHT EXPERIMENT

What if ... we thought about Artisan Intelligence not just Artificial Intelligence.

This is people using their hands to make things and passing on their knowledge to the next generation.

# Permaculture

... is an observational design philosophy. It encourages working with nature to understand what the relationships between elements are.

By understanding what space is and how living beings thrive, we can create cyclical, sustainable and regenerative ways of living.

# THOUGHT EXPERIMENT

Read The Secret Sky Garden by Linda Sarah and Fiona Lumbers and then imagine how you could transform your school into a garden as beautiful as this one.

What food is good for the planet?

Local: Grown nearby means less travel = less pollution.

Seasonal: Grown in the right season = less energy.

Organic: No harmful chemicals used.

Plant-based: Veggies usually need less water and land than meat.

Less Packaging: less plastic is better.

Gardens, balconies and window sills

We can all do our bit towards taking care of nature through our gardens, balconies and window sills.

Avoid using pesticides or herbicides.

**Grow more insect-friendly flowers** 

Don't tidy up too much – leaving garden waste in piles in the garden helps to create habitat for insects and invertebrates.

There are also natural elements that can help plants grow well. Copper has helpful properties that stops slugs, snails and fungi from eating your plants.

# PEOPLE WE ADMIRE

City Girl in Nature, Kwesia grew up in Deptford, London and, since an expedition to the Peruvian Amazon Rainforest with the British Exploring Society, she has become a campaigner for nature and the environment.

# BEAUTIFUL QUESTION

How can you be the change you want to see in the world?

# We Art Nature

... is a campaign to rewrite the dictionary definition of Nature to include humans. At the moment the ..... ????

# Senses

Nature invites us to use all our senses: sight, smell, touch, taste and hearing.

# THOUGHT EXPERIMENT

Go and find a blossom in spring, a flower in summer, or a berry in winter, and describe its perfume with as many adjectives as possible.

# 10% MORE OF THE GOOD STUFF

Every day discover one more animal, insect or weed that you haven't known about before.

# 10% LESS OF THE BAD STUFF

Use less pesticides, herbicides and fungicides on plants and encourage your families and friends to do the same.

Think about what you are eating and think about whether it is in season.

"Active Hope is not wishful thinking. Active Hope is about becoming active participants in bringing about what we hope for."

Joanna Macy

(activist, scholar of systems thinking and deep ecology)

# Education and Nature



Nature can teach us so much about how we can live in a greener, fairer, wiser way.

How can all schools be Nature Schools In the last few years, many people around the world have found many other ways of living within the Earth's Natural Boundaries.

These ideas bring exciting possibilities for us to try in a greener, fairer, wiser school.

# THOUGHT EXPERIMENT

How do we work within the existing curriculum to create a greener, fairer and wiser way of doing, being, thinking and learning?

Can we find ways of mixing in some old and new ideas into our projects?

# **FUTURE JOBS**

Green mentor, Climate ambassador, Youth worker, Sustainability Lead in Education

# Single-use plastic

In Oct 23, the UK government banned single-use plastics in take away packaging.

Instead biodegradable and natural materials such as paper and cardboard have been redesigned for use as cutlery bowls and containers.

This is much healthier for people and planet.

# THOUGHT EXPERIMENT

Can you think of where you can make changes in your school or organisation?

# Natural History GCSE

... is a new subject to be launched in the UK in 2026. It will teach students about the natural world, including local wildlife, ecosystems, and environmental challenges like climate change and biodiversity loss.

Students will learn through outdoor activities, observing and recording nature to understand how to protect it.

# BEAUTIFUL OUESTION

What if all subjects were taught with nature in mind?

# School Climate Action Plans

The UK Government is expecting all schools to make Climate Action Plans by 2025.

Schools will have to work out how to transform every part of the school life, thinking about food, nature, travel, waste, water and energy use, including procurement

(how they choose what stuff to buy).

# School culture

Very importantly, the Plans will show how to transform the school's culture: how we behave, how we communicate and what our values and choices are.

We will want to learn how to have one foot in difficult ideas, and one foot in understanding ideas. [??? what does this mean?]

Sometimes it might feel complicated but together we will find some answers.

# THOUGHT EXPERIMENT

Who should be involved in these Plans? Students, caretakers, governors, trustees, kitchen staff, cleaners, lunchtime supervisors, parents, local residents' groups ...?

# PEOPLE WE ADMIRE

Joanna Macy is one of the wise elders of the ecological movement. She is an author and a scholar of Buddhism, Systems Thinking and Deep Ecology. In The Work that · Reconnects she speaks about this time as'The Great Turning.

# 10% MORE OF THE GOOD STUFF

Find more ways of learning from nature as well as being in nature when you are learning.

Ask yourself regularly what would nature think?

# 10% LESS OF THE BAD STUFF

Do less of what nature would not like.



# Wood Wide Web

The Wood Wide Web is like a secret internet for trees.

Under the ground, tree roots are connected by tiny threads from special fungi called *mycorrhizae*.

These threads help trees 'talk' to each other.

They can send food, water, and even warning messages if bugs or danger are nearby. Big, old trees share with younger ones to help them grow. It's like a forest family helping each other through an underground network.

Just like we use our phone phones, trees use this natural web to stay connected and strong.

# Mycelium

... makes the Wood Wide Web possible. Fungi (kind of like mushrooms) form super tiny threads called *hyphae* underground that connect to tree roots. Together, they create a giant network called a *mycogrhizal network* (a big word that means 'fungus-root network').

Here's what's really cool:

**Sharing nutrients**: Trees give the fungi sugars they make from sunlight. In return, the fungi help trees find water and minerals like phosphorus.

**Sending messages**: If one tree gets sick or attacked by bugs, it can send chemical signals through the network. Other trees 'hear' the message and get ready to protect themselves.

**Helping others**: Big, healthy trees can send extra food through the network to smaller trees or trees that are injured or growing in the shade.

**Mother Trees**: Some scientists even call the oldest trees mother trees because they support the younger ones, like a parent!

So forests aren't just a bunch of trees – they're a big, caring community that looks out for each other through the Wood Wide Web.

# BEAUTIFUL OUESTION

What if humans could communicate through mycelium?

# Soil

... covers our planet in a rich blanket that is vital for growing for food and taking care of our ecosystems.

Worms are very important animals for healthy soil and for diagnosing healthy soil.

Many insects are important for composting plants and animal dung, pollinating our plants to grow food for humans as well as the wider ecosystem.

It can take between 400-1,000 years to grow 1cm of soil, but only one or two seasons to wash or blow away soil or damage its biome.

# LEARNING TIP

**Ecosystems** are any community of living species and their physical environment

# Compost, soil and the Biome

Healthy soil is full of microorganisms such as species of *bacteria*, *viruses* and *fungi*.

Composting is the rotting down of plant matter. A wonderful way of returning these microorganisms to the soil and is a perfect environment for all living things.

# THOUGHT EXPERIMENT

If your school was given money for planters, trees, green walls, water butts and outdoor education equipment like tools, waterproofs or fieldwork equipment such as camera traps and microscopes, what would you do with them?

# PEOPLE WE ADMIRE

Suzanne Simard is a Professor of Forest Ecology from Canada. She studies how trees 'talk' to each other using their roots and tiny fungi underground.

She found that trees share food and help each other, like a family. Her work helps people understand how forests stay healthy and connected, like a big family!

# 10% MORE OF THE GOOD STUFF

Find out how to compost the plants that have died and the weeds that you don't want.

# 10% LESS OF THE BAD STUFF

Encourage your friends and family not to use fungicides or pesticides when gardening.

# "All flourishing is mutual."

Robin Wall Kimmerer (Potawatomi botanist, author of *Braiding Sweetgrass*)



# Insects, worms and invertebrates

Many small creatures help the Earth stay healthy! They pollinate flowers so that plants grow fruits and seeds. They clean up dead things and turn them into soil. They're also food for birds and animals.

Without them, nature wouldn't work right. They're small, but they do big jobs every day!

# Insects

... are tiny animals with six legs, like ants, bees and butterflies. Some have wings and can fly.

Insects help plants grow, clean up nature, and feed other animals. Even though they're small, insects are super-important to our world!



# **Pollinators**

Bees, butterflies, and even beetles move pollen from flower to flower. This helps plants make fruits, vegetables, and seeds.

Without them, we wouldn't have many of the foods we eat, including apples, strawberries, and tomatoes.

# Recyclers

Worms, beetles, and flies help break down dead plants, animals, and poo, turning it into rich soil that helps new plants grow. They're nature's clean-up crew.

# Composting insects

Dung beetles were imported to Australia from countries like South Africa because the native beetles were not able to process the cattle dung and so the soil was not able to be further fertilised, leading to poor pasture quality and increased fly populations.

# BEAUTIFUL OUESTION

Why are dung beetles, bees, worms and spiders the hardest-working and strongest animals on the planet?

# Food for other animals

Lots of animals like frogs, birds, and spiders eat insects and invertebrates. Without them, those animals wouldn't have enough to eat. So insects help keep the food chain working.

# Pest controllers

Spiders, ladybirds, and other insects eat bugs that hurt crops. So they help farmers grow food without needing too many chemicals.

# THOUGHT EXPERIMENT

Do some research and then imagine what kinds of microorganisms and invertebrates live in a small cupful of soil and what their iobs are.

# What is the point of house flies?

They feed on and process dung and rotting material as well as the pollination of flowers and of course provide food for bats and birds such as swallows, swifts, house-martins as well as reptiles and fish such as trout and salmon.

# The importance of worms

Worms are the soil's equivalent to street cleaners and rubbish men as well as gardeners. They bring the leaves and dead plants into the soil and compost them thus releasing the nutrition into the ground.

# FUTURE JOBS

**Entomologist, Ecologist, Biologist** 

## Invertebrates

... are animals without backbones.

They include bugs, worms, jellyfish, and octopuses. Some are soft; some have hard shells. Invertebrates live everywhere – in water, on land, and even in the sky.

# RESEARCH EXPERIMENT

Find out more about what insecticides, pesticides, fungicides and fertilisers are, what are their names and how they affect the health of the soil, insects and water and river ecology.

# 10% MORE OF THE GOOD STUFF

Find out more about insects or invertebrates

Do more to encourage insects, worms and invertebrates. Plant insect friendly plants on your window sill, balcony or garden. Or at school.

# 10% LESS OF THE BAD STUFF

Avoid using chemicals at home and in the garden that damage the soil and poison small creatures.

# Land THINK BOOK [1.1] THE GREAT IMAGINING [Staffordshire]

# Woodlands, forest and rainforests



Forests are large areas filled with trees and can be hot, cold, dry, or rainy. Jungles are a type of forest that's hot, wet, and full of thick plants and vines.

All jungles are forests, but not all forests are jungles, and jungles

are harder to walk through.

# Why are they important?

Trees, forests, and jungles give us clean air to breathe and homes for animals. They make shade, food, and help keep the Earth cool. Trees also stop soil from washing away.

Forests are like nature's lungs and playgrounds for wildlife. We need them to keep our planet healthy and happy!

# THOUGHT EXPERIMENT

Think about the air that goes through your lungs and imagine the molecules travelling out into the breeze and being absorbed by the trees and for them in turn to breathe out oxygen and send their molecules to you to breathe in.

# Rainforests in england

England has special rainforests called temperate rainforests. They grow in places like Devon and Cornwall where it rains a lot.

These forests have mossy trees, ferns, and animals that like cool damp conditions. People are trying to protect them because they are important biodiverse ecosystems that clean the air, absorb carbon and keep us healthy!

# Clean air

Trees 'breathe in' carbon dioxide ( $CO_2$ , a gas we don't want too much of) and 'breathe out' oxygen (the gas we need to live). So when we breathe, we're getting fresh air thanks to trees!

# BEAUTIFUL OUESTION

Where is the air freshest around you?

# Rain and water

Forests help make rain! Trees pull water from the ground and send it into the air, which can form clouds. They also help keep rivers and lakes full and clean.



# Animal homes

So many animals live in woods, forests and jungles – squirrels, monkeys, birds, frogs, bugs, even big cats like tigers! Trees give them food, shelter, and places to play and hide.

# Food and medicine

We get bananas, nuts, spices, and even cocoa (for chocolate!) from forests.

Most of our medicines used today have been discovered and still use ingredients found in biodiverse

regions such as forests.

# Climate change

Forests help keep Earth from getting too hot. They trap gases that cause climate change and keep the weather more balanced.

# The Chase

A chase is an old word for a special kind of forest where people used to go hunting, especially kings and queens.

It wasn't just any forest – it was protected, and only certain people could hunt the animals (such as deer). So, a chase is like a royal wild forest!

# Forestry clearances

Trees are still being cut down throughout the world to clear space for animal farming, agriculture, logging and other human developments.

# BEAUTIFUL OUESTION

What would you feel if a new town was built on Cannock Chase?

# FUTURE JOBS

Forester, Tree Surgeon, Ecologist

"In some Native languages, the word for plants translates to 'those who take care of us"

Robin Wall Kimmerer (Potawatomi botanist, author of *Braiding Sweetgrass*)

# 10% MORE OF THE GOOD STUFF

Spend more time walking in woodlands

# 10% LESS OF THE BAD STUFF

Eat more locally grown, seasonal plant based food to prevent trees being cut on the other side of the world.

# What is land used for?

Just 19% of the land in the world is wild or untouched by humans. The rest is



cultivated and is in some kind of official ownership.

In the UK, only about 13% of the land is considered wild or semi-wild – meaning it's mostly left to nature, like forests, mountains, moorlands, or wetlands with little human change.

Many wild places in the UK are protected to help plants and animals survive, like national parks, nature reserves, and areas of outstanding natural beauty (like Cannock Chase!).

# Who owns the land?

Half of the land in the UK is owned by only one person for every two thousand people. [confusing???]

Is this wise? Can they really use that much land?

# What is the land used for?

In the UK, only about 6-8% of the land is covered by towns, cities, buildings, and roads. That might sound small, but it feels like more because lots of people live in those areas!

Here's a simple breakdown:

Farming land: around 70%

Woodland and wild/semi-wild land: 13%

Urban areas (towns, roads, etc.): 6-8%

Horticulture (growing fruit, veg, flowers, etc.):1%

Other uses (like parks, golf courses, etc.): 3%

So even though cities feel big, nature and farmland still cover most of the UK

# THOUGHT EXPERIMENT

What do you think the proportions should be and why?

# LIBRARY

Who Owns England? by Guy Shrubsole is all about land rights, the history of land ownership, and the idea of the commons (land that everyone can share and care for).

# BEAUTIFUL OUESTION

What if we used less land for animals and more land for horticulture?

# Farmers

There are approx. 178,000 farmers, managing 70% of the land in the UK, providing half of the food we eat. We import the rest.

# THOUGHT EXPERIMENT

Can we grow more food locally?

Do you know anyone who grows any food?

Do you know any farmers in your area?

# FUTURE JOBS

Regenerative farmer, horticulturalist, paludiculturalist, agroforester, dry-stone waller, tree surgeon

# The Right to Roam

... in England and Wales comes from the Countryside and Rights of Way Act 2000, a law which means people can walk, explore, and enjoy certain natural areas like mountains, moors, forests, and coastlines without needing permission from the landowner – as long as they respect nature and follow the rules:

Things to Remember:

Close gates behind you, Don't scare animals, Take your rubbish home, Stick to paths if asked, and Be kind to nature.



# BEAUTIFUL QUESTION

Do you think that people have a right to walk wherever they choose even if the land belongs to someone?

# 10% MORE OF THE GOOD STUFF

Go walking more in nature

# 10% LESS OF THE BAD STUFF

look at where food comes from and encourage your family and friends to buy more food in season and from local food growers.



# Agriculture and farming

There are different types of agriculture and farming. Some farmers grow crops like wheat or vegetables. Others raise animals like cows and chickens. Some use big machines, while others use nature-friendly ways like organic or regenerative farming.

Farming can happen on big farms or small ones, but all grow food for us.

# Arable farming

... is growing plant *crops* like wheat, corn and rice. Farmers plant seeds, care for them, and harvest when they're ready to eat.

# Horticulture

... is the science and art of growing plants, including fruits, vegetables, flowers, and trees.

# BEAUTIFUL QUESTION

Is a horticulturalist doing the most important job in the world?

# Ruminants

... are animals like cows, goats, and deer that eat plants and have special stomachs. When they are allowed to graze in fields they help the ecosystem by spreading seeds, which helps new plants grow. Their manure acts as fertilizer, enriching the soil. By grazing, they also control plant growth, keeping grasslands healthy.

# Animal farming

(also called livestock farming). These farms raise animals like cows, chickens, pigs, and sheep, for their meat and for the things they produce (like milk, eggs, and wool). The animals are cared for and live on fields or in barns.

# Factory farming

... is when lots of animals like cows, pigs, or chickens are kept in tight spaces in vast sheds to grow quickly for food. They don't have much room to move or play.

It makes food cheaper, but it can be hard on the animals and is terrible for the environment because of pollution, chemicals and crops being grown for animals not humans.

# Dairy farming

Cows who are kept for dairy production (such as milk and cheese) usually have their calves taken from them at birth. They are also kept in giant sheds and fed on grain that could be grown more efficiently for humans.

# BEAUTIFUL QUESTION

Why do we allow more cruelty towards the animals that we eat than those we have as pets?

# Industrial farming

... happens on large farms that use big machines, chemicals, and grow lots of the same crop, often referred to as monocultures.

They produce tons of food fast, but sometimes it can hurt the soil or environment if not done carefully.

# Organic farming

... avoids chemicals. Farmers use natural compost, friendly bugs, and rotate crops to keep the soil and food healthy.

It's better for nature and the planet

# Regenerative farming

... helps repair the Earth while growing food.

These farms focus on healthy soil, planting many crops, and working with animals and nature.

# Urban and vertical farming

Some farms grow food in cities or even in tall buildings! They use less space, water, and can grow food close to where people live.

# Small family farms

... can grow many different foods and take care of animals. They may sell food at markets or share it with their community.

So, whether it's a big field, a tiny garden, or a rooftop in a city, farmers are growing the food we eat in all kinds of cool ways

# FUTURE JOBS

Regenerative farmer, Horticulturalist, Urban farmer

# THOUGHT EXPERIMENT

Why not try being a mini farmer at home with a few seeds.

# 10% MORE OF THE GOOD STUFF

Eat more plant based food

# 10% LESS OF THE BAD STUFF

Eat less meat and dairy.

# Peatlands and wetlands

The peatland ecosystem is one of the world's most important carbon sinks (storing carbon safely so that it doesn't cause climate change).

When we drain peatlands we reverse this process and the carbon dioxise  $(CO_2)$  is released into the atmosphere. A third of vegetables in the UK are grown in drained peatlands.

# Peatlands

... are magical lands that are waterlogged. Sometimes we call them bogs. There are incredible stories and myths about these unique places. They are one of nature's defences against flooding as well as being very biodiverse.

A centimetre of peat grows over 100 years. So one metre of peat is 1,000 years old. The water acts as a preservative to organic material so it is preserved without rotting.

# Paludiculture

... is a special way of farming on wet and boggy land, like peatlands, marshes, or wet meadows. The word comes from the Latin word



palus, meaning swamp.

# LEARNING TIP

A carbon sink is an ecosystem or material that absorbs and holds more CO<sub>2</sub> than it emits.

# Wild foraging

Many plants and weeds such as marjoram, dandelion, nettle and wild garlic, growing wild in our streets, parks, gardens, meadows and woodlands, are edible or useful in some way.

They can be good for food or textiles as well as medicine, cleaning products and self care.

# Birds

... are not just beautiful species to share our planet with. They are also vital to our ecosystem Since 1970, the UK has lost around 73 million birds. This happened because of habitat loss, farming changes, less food, and climate change.



# PEOPLE WE ADMIRE

**Dr Mya-Rose Craig** is a 21-year-old British-Bangladeshi ornithologist, environmentalist, diversity activist as well as author, speaker and broadcaster.

Aged 11, she started the popular *bird girl* blog which has encouraged many young people to feel passionately about birds.

# LIBRARY

Rachel Carson, Silent Spring

# Pesticides, herbicides, fungicides

Farmers used to use natural things like ash or special plants to keep bugs, mould and weeds away.

More recently, we have used more chemicals to control nature called *pesticides* (for bugs), *herbicides* (for weeds), and *fungicides* (for fungi). They helped grow more food, but are very bad for the ecosystem as well as our bodies.



# Some good supply chain labels



EU Organic/Soil Association · LEAF (Linking Environment And Farming) · Marine Stewardship Council (MSC) · Fairtrade · RSPCA Assured Vegan / Vegetarian symbols · Carbon Trust label Recycling symbol

# THOUGHT EXPERIMENT

Research these labels and make a mind map of them and see what is missing. How can all this be simplified?

# 10% MORE OF THE GOOD STUFF

Listen to the birds and feed them with grains.

# 10% LESS OF THE BAD STUFF

Encourage your friends and family to buy peat-free compost for growing plants.

"A simple life with dirt on your hands is richer than gold in your pockets."



Who said this????

# Agro-ecology

Agro-ecology (sometimes called Permaculture) is a way of farming that works with nature, not against it. Farmers grow food while helping the soil, animals, and plants stay healthy. They use less chemicals and more natural ways, like compost and friendly bugs. It's like farming as a team with nature to protect the Earth.

Different crops together

Farmers often grow many kinds of plants together (not just one big field of the same thing). This keeps the soil happy, stops pests, and gives animals more places to live.



# Trees on farms

Some agro-ecology farms plant trees among their crops.

Trees give shade, keep the soil strong, help store water, and give birds and bees a home.

# VIDEO AND BOOK LIBRARY

Biggest Little Farm, Six Inches of Soil, Kiss the Ground

# No-dig farming

Scientists are now learning much more about the soil that our plants and food depend on.

The soil biome is the balance of microorganisms and worms that keep the soil healthy. When we plough the soil it breaks up the structure of the

soil and exposes it to the air.



So modern ecological practices use special machines that plant seeds without digging up the soil.

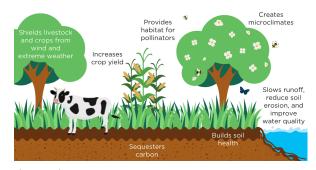
# Regenerative agriculture

... is a way of farming that helps nature stay healthy. Farmers grow food while feeding the soil, planting different crops, and caring for animals.

It brings life back to the land, like giving Earth a big hug. It helps people, plants, and animals all live well together!

# BEAUTIFUL OUESTION

How would it feel if we only lived in nature?



# Agroforestry

... means combining agriculture and trees. It's a land management approach with loads of benefits.

Planting trees, shrubs and hedges on farms can give farmers healthier soil and higher yields – not to mention creating vital homes for wildlife.

# BEAUTIFUL QUESTION

What if... all public institutions such as schools, hospitals, and prisons used local, seasonal, organic, plant-based food?

**Maybe...** Students would eat fresh meals that help them stay healthy, focused, and ready to learn...

Prisoners would get better nutrition, helping them feel calmer, stronger, and more positive...

Patients in hospitals would heal faster with healthy, nourishing food. Local farmers would be supported, and food wouldn't need to travel far, reducing pollution...

Eating what grows in each season also protects nature and teaches people where food comes from. It's better for people, animals, and the vEarth!

"Live close to the ground and you'll hear the whispers of the land."

Who said this?

# 10% MORE OF THE GOOD STUFF

More plant based food and local food in season from regenerative sources.

# 10% LESS OF THE BAD STUFF

Eat more plant based fresh food and less processed food that contains more chemicals.

# PEOPLE WE ADMIRE

Vandana Shiva is an environmental activist from India who protects nature and supports small farmers. She campaigns against harmful chemicals and big seed companies, and promotes organic farming, seed saving, and food justice. Her work helps communities grow healthy food, protect biodiversity, and care for the Earth.

# Rewilding, clean water and soil

NO MOWING

Local rewilding means helping nature return to places near where you live such as parks, gardens, or fields.

People plant flowers and trees, and let grass grow wild. They make homes for bees, birds, and bugs.

It helps nature be happy and healthy close to where people live and play.

# THOUGHT EXPERIMENT

What if... we rewilded our streets, parks, and hedgerows with insect-friendly plants such as hollyhocks, comfrey, lavender, foxgloves, rosemary, thyme, chives and geraniums.



What if... we regenerated more of our land back into meadows that are good for the soil as well as for pollinating insects. What would the world look, smell, taste, sound and feel like then?

# VIDEO AND BOOK LIBRARY

Wilding is a true story about a couple who let nature take over their old farm. The film shows how they took down fences and let animals roam free. Instead of farming, they trusted nature to heal the land. It became a big, wild place full of life.

# National Park City

National Parks are special places where we have a better relationship with nature, culture and heritage. Combining the long-term, large-scale vision of national parks with cities is a way of reimagining urban spaces as part of nature, not separate from it.

# THOUGHT EXPERIMENT

Imagine the place you live was a National Park... What would be the special features? What would make it even better?

Can you imagine being a town planner and what you would do to bring in more nature?

# Beavers return to Staffordshire

After 400 years, beavers have been reintroduced to Staffordshire by Celtic Rewilding, a conservation company based in Leek.

The beavers are now thriving in a large enclosure at Trentham
Gardens near Stoke-onTrent where their natural



behaviours are enhancing biodiversity and improving water quality.

These wonderful animals will help the river banks to form stronger routes, which can help prevent flooding.

# "The land doesn't ask for much—just that you listen, and give more than you take."

Robin Wall Kimmerer (Potawatomi botanist, author of *Braiding Sweetgrass*)

# 'Brown river to blue river'

... means turning dirty, muddy rivers into clean, healthy ones.

**Brown rivers** are full of pollution and soil. **Blue rivers** are clear and safe for wildlife and people.

We can help by planting trees, stopping pollution, and using nature-friendly farming. It's about healing water and nature

# THOUGHT EXPERIMENT

Why is the Freshwater Pearl Mussel an endangered species and why does it tell us about the quality of the water?

# Make soil healthy

... by adding compost or manure to feed it. Grow different plants (crop rotation), and don't use too many chemicals. Let worms and bugs live in it. Keep soil covered with plants or mulch, so it doesn't dry out or blow away. Healthy soil helps grow strong plants

# Make forests and woodlands healthy

... by planting native trees, protecting old ones, and leting fallen leaves and logs stay. Don't cut too many trees at once. Help wildlife by keeping homes like nests and burrows safe. Remove harmful plants and let nature grow wild and free. Healthy forests care for Earth.

# "Chop wood, carry water— there's peace in the doing."

Zen proverb

# 10% MORE OF THE GOOD STUFF

Join the No Mow Campaign. Plant flowers that are good for pollinating bees. Create a rewilding project with friends and family.

# 10% LESS OF THE BAD STUFF

Use less chemicals that might pollute our rivers and soils.

# Food and supply chains



Lots of our food comes from a long way away and travels mad distrances to be processed in factories in other countries – a long *supply chain*.

# THOUGHT EXPERIMENT

See if you can find out some information about where and how your food was made, how it has travelled and what happened to it on the way.

# Chocolate

... starts with *cacao pods* from trees. Farmers pick them, remove the beans, and ferment them to



bring out the flavour. Then the beans are dried, roasted, and crushed into a paste. Sugar and milk are added, it's mixed, melted, and cooled into bars.

# THOUGHT EXPERIMENT

Find out all about the process of making chocolate from the fruit on the tree, the fermentation process all the way to the foilwrapped bar we buy in the shop. Draw some notes from this process.

# Fermentation

... is a magical natural process where tiny living things like yeast or bacteria break down sugars in food.

This changes the food's taste, texture, or smell. It helps make bread



rise, turns milk into yogurt, and gives chocolate its flavour. Fermentation also helps preserve food and can make it healthier.

# Animal farming

... can be bad for the environment because it uses lots of land, water, and food.

Trees are cut down to make space for animals, and their waste can pollute rivers. Farm animals also produce gases that warm the Earth, which can cause problems like climate change and weird weather.

# Plant-based diet

Eating mostly plants is good for the planet, animals, and our health.

It uses less land and water, creates less pollution, and helps fight climate change. It's kinder to animals and gives us vitamins and fibre.

You don't need to be vegan – just choosing more plants is a smart, caring choice.

# **UK National Food Strategy**

was written by Henry Dimbleby in 2021 and is a plan to help everyone eat more healthily, protect nature, help farmers move to better practices, reduce waste, and make good food affordable for everyone.

It's like a big recipe for a **fairer**, **greener**, and **healthier** food future.

# THOUGHT EXPERIMENT

Find out more about this and write down your thoughts about it.

What is good and what do you not agree with. How can this apply to your school, your community and your home?



... is a project where people grow fruits, vegetables, and herbs in public places for everyone to share. It started in Todmorden, England.

The goal is to grow food, build stronger communities, and care for the planet. Anyone can join in – their motto is, 'If you eat, you're in!'

# BEAUTIFUL QUESTION

What if every public verge and patch of grass became a vegetable plot?







# BEAUTIFUL OUESTION

What if... everyone had fresh, local, seasonal, plant-based, organic food that was kind to animals and the Earth?

People would be healthier, animals would be treated better, and nature would be cleaner. Farmers would be happy, and no one would go hungry. Good food for all would make the world a better place.

# The Right to Grow

... means people should be allowed to grow food on unused land in towns and cities. It helps communities grow fruits and vegetables together, share healthy food, and care for nature.

It's about making space for everyone to plant, grow, and enjoy fresh food

# 10% MORE OF THE GOOD STUFF

Grow some herbs, sprouts or vegetables on your windowsill, balcony or garden. use them in recipes.

# 10% LESS OF THE BAD STUFF

Eat less meat and processed food.



# Land economics

The word economics comes from the Greek word oikonomia, which means 'household management'. It combines oikos (house) and nemein (to manage).

Long ago, it meant how to wisely manage a home's resources. Over time, it grew to mean how we manage money, goods, and resources in whole countries and the world.

# Circular economy

... means using things in a smart way so they last longer. Instead of throwing stuff away, we repair, recycle, and use it again. It's like giving things many lives.

This helps stop waste, saves resources, and keeps the Earth clean and healthy.

# Compostable packaging

... can be made from natural things like corn, bamboo, seaweed, or even mushrooms! Plantbased glues and films can be used to make boxes or wraps.

These materials break down safely in soil. After use, the packaging goes in a compost bin, not the bin, and turns back into healthy soil!



# Green jobs

... in a circular economy help the planet by reducing waste and reusing things. People fix clothes, bikes, and electronics, recycle materials, grow organic food, design eco-friendly products, and teach others to live greener.

These jobs protect nature, save resources, and build a cleaner, healthier future for everyone.

# Recycling and repair

Fixing electronics, bikes, and clothes. Working at recycling centres and reuse shops.

# Eco-design and manufacturing

Designing products that last longer or can be recycled easily. Making things from natural or recycled materials.

# Sustainable farming

Growing organic food. Managing compost and food waste.

# Education and community work

Teaching others how to waste less and live areener.

# Resource recovery

Turning old materials into new products (like plastic into bricks!)

# Nettles

... are considered weeds but can be part of the circular economy by being used for natural fabrics like clothing, compost and organic fertilisers, and edible products like soups and teas.

They grow without chemicals, help improve soil health, and support biodiversity, making them a sustainable resource for various uses.

# THOUGHT EXPERIMENT

Think of another natural material that could be used in the circular economy.

# PEOPLE WE ADMIRE

**Rob Hopkins** is the co-founder of Transition Network and of Transition Town Totnes, and author of several books including The Transition Handbook and most recently, From What is to What if: Unleashing the Power of Imagination to Create the Future we Want.

# 10% MORE OF THE GOOD STUFF

Be more of a champion for nature and the 'circular economy'

# 10% LESS OF THE BAD STUFF

Think about everything you throw away.



# Composting and waste

Composting helps the environment by turning food scraps and yard waste into rich soil. It keeps trash out of landfills and so it reduces pollution. When compost breaks down, it gives nutrients back to the earth, helping plants grow better. It's like recycling nature's waste into something useful.

# Biodegradability

Nature can compost everything that is biodegradable (organic material made of living animals and plants) but humans are making more and more stuff that is made of inert chemicals like nylon or plastic that can't be composted. So things need to be recycled carefully.

# How to compost

Composting is turning old food into healthy soil!

First, collect things like fruit peels, veggie scraps, and eggshells. Put them in a compost bin with leaves or paper.

Worms and bugs help break it all down. After a while, it turns into rich soil that will be great for plants.

# Plastic

... is strong and cheap, but it harms the environment because it doesn't break down easily.

It can pollute oceans, harm animals, and stay in landfills for years.

# BEAUTIFUL QUESTION

What if... everything was made of eco-friendly materials like metal, glass, bamboo or recycled plastic.

# Non biodegradable

Some special fungi can eat plastic, oil, and other trash that normally doesn't break down. Scientists are studying them to help clean the Earth.

These fungi turn yucky waste into harmless stuff, like magic! One day, they might help fix pollution and make our planet cleaner and healthier.

# THOUGHT EXPERIMENT

Plastic Clever Schools reduce plastic waste. How can your school be a Plastic Clever School?

# When we buy less stuff

... it helps the Earth. Fewer things means less pollution, fewer trees cut down, and less waste in landfills. We save resources like water and energy, and keep the planet cleaner.

It's like giving the Earth a break and helping it stay healthy, and you will be saving some money for other things that are important to you.

# THOUGHT EXPERIMENT

What would your community need to be self-sufficient - for the community to grow all their own food and to make all their own clothes and useful items?

# THOUGHT EXPERIMENT

Sometimes when we want or need something, we only need or want it for a short amount of time. Try thinking: Can I borrow it ? Can I hire it ? Can I find one that isn't being used? Some areas have a Freecycle group.

# Recycling

... is great for the planet! It saves natural resources like trees, water, and minerals. It helps reduce pollution by using less energy to make new things.

Recycling also keeps trash out of landfills, which helps protect animals and nature. It's like giving things a second life.

# Repair cates

... are places where people have come together to learn how to repair all sorts of household items. Maybe a toaster, or a radio. Its often a bit like solving a puzzle, or being a detective. These skills are quite complicated, but once you've learned some skills, your toys, gadgets and other useful things will last for years.

# BEAUTIFUL OUESTION

What would it feel like if you could learn a superpower and repair everything in your house that got broken.

# FUTURE JOBS

Waste recycler, Repairer, Fixpert

# 10% MORE OF THE GOOD STUFF

Compost more of your food scraps. Create less waste and repair stuff that is broken.

# 10% LESS OF THE BAD STUFF

Think before you throw stuff away. Is there a better bin to use? Can I recycle, repair or

# Land and art

Artists and creatives, just like scientists, have been studying the beauty and extraordinary intelligence of the living and natural world.

From the rituals and customs of people who live close to the land to botanical illustrators and land artists there are many people who have honoured nature at the centre of their work.

# BEAUTIFUL QUESTION

What is art for in a time of ecological and climate emergency?

# The Landing Project

... is a UK art project that explores the past, present, and future of farming and rural work.



Artists create paintings, prints, weavings, and large woolly sculptures inspired by the land and those who work it.

The project connects people to the countryside through creative expression.

6 Inches Of Soil

# PEOPLE WE ADMIRE

Heather Ackroyd and Dan Harvey are two British artists who work together to create art using living things like grass and light. They've grown grass on buildings and made pictures using sunlight and plants. Their art shows how nature and people are connected and how we can care for the Earth.

Louis VI is a multi-talented artist from London – producer, zoologist, rapper, and musician. His album *Earthling* mixes love for nature with powerful messages on colonialism and climate justice. A proud 'nature geek', he uses music and film to speak up for the environment, especially for communities of colour who are often left out.

Richard Long is a British 'land artist' born in 1945 in Bristol. He is known for creating art by walking through nature and making simple shapes like lines and circles using stones, mud, or by leaving footprints. His work shows how people and nature are connected.



Andy Goldsworthy is a British artist who makes art using the patterns in nature. He uses leaves, stones, snow, and sticks to create shapes and patterns outside. His art doesn't last forever – it melts, blows away, or fades. He shows how beautiful and everchanging nature is.

EarthPercent is a project started by musician Brian Eno to help protect the Earth using music. Musicians give a small part of their money to support the planet. This money helps fight climate change and care for nature. It's like music helping the Earth stay happy and healthy!

# FUTURE JOBS

Documentary maker, Land Artist, Socially Engaged Artist

# WaterBear

... is a free streaming platform offering documentaries and short films focused on environmental and social issues. It aims to inspire and empower viewers to take action for a more sustainable future.



The platform covers topics like climate change, biodiversity, and community initiatives, and is accessible on various devices without advertisements.

# THOUGHT EXPERIMENT

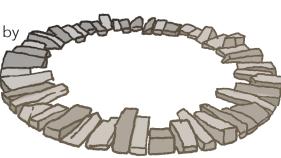
What would you do if you had a platform as an artist, a musician or a filmmaker?

# 10% MORE OF THE GOOD STUFF

Create art that puts nature at the centre. Use art and performance to get your message across.

# 10% LESS OF THE BAD STUFF

Think about how your artwork or that of others is impacting in the planet. How much carbon emissions is it generating compared to the number of people who are engaging with it.



# Social justice

# Poacher turned gamekeeper

Where poachers, loggers, and miners are given benefits like payment, ownership and protections to take care of the land, rather than damaging the land, it could help save forests, wildlife, and ecosystems. They'd earn money by restoring nature, creating sustainable jobs. This would improve communities, reduce pollution, and help slow climate change, benefiting both people and the planet!

# Land commons

... is land that belongs to everyone, not just one person. It's a place where people can share resources like water, trees, or fields to grow food.

Just like a playground is for all kids, land commons are for everyone to use wisely and take care of together.

People who didn't own land used common land to graze their sheep or cattle. Often commons

would have a good spring for their livestock to drink from. It would be a place where people would come together and catch up about how to make things thrive.



Who should own our land?

# The Tragedy of the Commons

... is a famous idea proposed by Garrett Hardin in 1968, where he argued that when people share a resource (like land, water, or fish), they often overuse it, causing harm to everyone.

But many academics and intellectuals have questioned this pessimistic view. For example:

Real-world cooperation: Hardin imagined people as selfish and unable to share. But in real life, communities often share resources successfully. People make rules, watch over each other, and care for the land – especially in Indigenous and traditional societies.

Nobel Prize-winner **Elinor Ostrom** studied real communities around the world. She showed that 'the commons' doesn't always lead to tragedy or inequality – people can and do create smart systems to share resources fairly and sustainably.

Some critics say Hardin's idea was a **political tool** used to support privatising land and resources, pushing the belief that government or private control is always better than community sharing—which isn't always true or fair.



The model **ignored social justice**, and didn't consider who controls the land, or how power and inequality affect access. Many commons were taken from Indigenous people, whose ways of managing land were deeply respectful and sustainable.

In short, the idea was too simple. Real people can and do care for the Earth together – the commons can work, if managed with respect, fairness, and community spirit.

# THOUGHT EXPERIMENT

Find out more about common land and The Tragedy of the Commons. Think about who owns the land you walk on and why they own it. If they inherited it then how did their ancestors get the land? Or if they bought it, how did they get their money and where did they get their money from?

# PEOPLE WE ADMIRE

**Guy Shrubsole** is a British environmental campaigner and author known for his work on land rights, conservation, and rewilding in the UK. He has written several books, including Who Owns England?, The Lost Rainforests of Britain, and The Lie of the Land.

# Charter of the Forest

A long time ago, when kings owned most forests, people weren't allowed to use them. Then **The Charter of the Forest** was made, around the same time as the Magna Carta. It gave ordinary people the right to gather wood, graze animals, and use the land.

Guy Shrubsole says this old rule shows how land can be shared fairly. It reminds us that nature isn't just for a few people—it's for everyone to care for.

# 10% MORE OF THE GOOD STUFF

Explore what it is like to share more with others.

# 10% LESS OF THE BAD STUFF

Be more generously spirited.



# Thanks

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