SUSTAINABILITY QUEST

Environmental Awareness Building Game

'Sustainability Quest' is an interactive game that was designed during the '***Nature the Youth Work***' Erasmus+ project as a tool to address different topics of *Environmental Sustainability,* and at the same time, contribute to *Discussion, and Knowledge* and *Awareness Building* on the topic.

The game is suited **for groups**. The game set includes **60 printable Question Cards** and **Answer Cards**, divided into **5 categories** (12 Cards per category), namely: *Concepts, Recipes, Facts, Sustainable Living,* and *Random*. The questions cover different aspects of sustainability, including current concepts and ideas in the field, as well as curious facts, available definitions, and information on the topic. Each *Answer Card* contains a short description (answer) and additional information on the subject covered by the question.

The cards can also be used separately and selectively as *Discussion Starters* to review specific *Sustainability* topics in detail.

QUESTION CATEGORIES AND THEIR CONTENT:

- **CONCEPTS:** covers some of the current concepts, trends, and ideas in the field of environmental sustainability;
- **FACTS:** consists of knowledge questions requiring providing factual information;
- **RECIPES:** focuses on the 'ingredients' of different products (e.g., a tea bag), ideas (e.g., environmental psychology), or substances (e.g., soil), requiring assessment and providing information on what something consists of or is made of;
- **SUSTAINABLE LIVING:** contains a set of current ideas that have been associated with 'sustainable lifestyles';
- **RANDOM:** random questions in relation to 'sustainability' that could fall into any of the aforementioned categories.

SKILLS TO DEVELOP AND/OR PRACTICE: *Teamwork, Knowledge Building and Sharing, Cooperation, Discussion Skills, Environmental Awareness*

HOW TO PLAY:

1. Divide the group into **teams of 3-5 people** per team. Give teams a task to come up with a team name and write down the team names, e.g., on a flipchart or blackboard.
2. Let the team leaders roll the dice or play '*Rock-Paper-Scissors*' to **define the sequence** of the teams answering, or decide yourself on the sequence (e.g., clockwise or counter-clockwise).
3. **Game time!** Each team gets their turn to roll the dice/cube and pick a question from the drawn '*Sustainability*' category. Each team gets a minute (or other defined time period) to discuss within the team the answer. When time runs out, the team presents the answer. You, as a facilitator, assess the answer and **grant the answer card to the team if the team answered correctly**. If the team did not give a correct answer, other teams can contribute their answers and gain bonus points.
4. **Bonus points:** You can award bonus points for the teams that added considerable suggestions to the answer of any team and/or when answered correctly instead of the other team. Once a team has a specific amount of bonus points, they can, e.g., pick a question card from any category they want.
5. **For the team to win**, the team has to **obtain at least one card from each category**!

PREPARATION:

SPACE: Create small clusters with chairs (and a table) in the working room, corresponding to the number of teams you plan to have. If played outdoors, let the teams gather in small clusters close enough to hear other groups speaking, yet far enough to discuss the answers within their own group.

CARDS: Print and cut out the cards and glue together the 'Question' and the 'Answer' parts of each card to have the Question and corresponding Answer on one card. It is suggested to cover the 'Answer' side of a card, e.g., with a post-it, and it can be uncovered when handed to the team that responded correctly to the question, so that the team can read on more information on the Question.

CUBE/DICE: You can print, cut out, and glue together the provided cube (*see the next page*) with the categories of the game, OR use a dice and assign numbers 1-6 to different Categories (e.g., '1' *Facts*, '2' *Recipes*, '3' *Concepts*, '4' *Sustainable Living*, '5' *Random*, '6' *Throw Again*).

GRANTING POINTS: You can assess individually or together with other teams if the answers provided by the answering team are sufficient to grant a point/card in the specific category. Elaborate on the answers of the teams to create a greater understanding/ discussion on the topic/question.

As the game facilitator, you can also grant bonus points (e.g., in the form of candy or objects that can be quantified) to competing teams if they provided considerable suggestions to the answer to the question.

KEEPING THE SCORE: You can use a flipchart or blackboard with all the teams listed and make notes each time a team acquires a point in a specific category (or bonus points), or use any other methods of keeping the live scores.

VARIATIONS:

ADD YOUR OWN QUESTION CATEGORIES, e.g., *Action-based Questions*, where teams need to come up with a creative solution/ strategy or perform the answer as a team (e.g., through acting, drawing, creating a slogan for a campaign on a specific topic, etc.).

USE CATEGORIES SELECTIVELY: You do not have to use all the categories; you can also create a Quiz using the cards from categories relevant to the topic of your specific workshop.

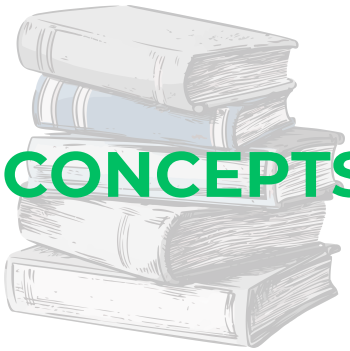
REVISE THE CONTENT CREATIVELY: To revise the topics covered, the teams can have a final creative task combining all the cards they have collected and presenting their content in a creative way to other groups, e.g., a podcast, a program for kids, a news report, etc.

REFLECTION QUESTIONS:

- *What was the most interesting/ curious/ shocking/ useful thing you learned during this game?*
- *What does sustainability mean to you?*
- *Why is it important to know and discuss different aspects of Sustainability?*
- *How can we (you) implement more sustainable activities in our daily lives?*

Co-funded by the European Union

RECIPES



CONCEPTS

RANDOM

THROW AGAIN

FACTS

SUSTAINABLE LIVING

1. Cut out the template.
2. Fold the **cube** along the lines on the template to ensure a good **cube.**
3. Then **glue** the flaps.

Co-funded by the European Union

CONCEPTS

What is
ZERO WASTE?

CONCEPTS

CONCEPTS

A set of principles coined by Bea Johnson in **2008**, **focused on waste prevention** that encourages **redesigning resource life cycles** so that all **products are re-purposed and/or reused**. The goal of the movement is to avoid sending trash to landfills, incinerators, oceans, or any other part of the environment.

The current guiding **8Rs**: **Rethink**, **Refuse, Repair, Reduce**, **Reuse, Regift, Rot (Compost), Recycle**.

What is
CIRCULAR ECONOMY?

CONCEPTS

CONCEPTS

An economic system **based on the reuse** and **regeneration of materials** and **products**; a model of production and consumption, which involves **sharing, leasing, repairing, refurbishing** and **recycling existing materials** and **products** for as long as possible (returning them into the product cycle at the end of their use, while minimising the generation of waste).

In such an economy, **all forms of waste, are returned to the economy** or **used more efficiently.** The fewer products we discard, the less raw/virgin materials we need to extract for manufacturing new products.

What is
PLANNED OBSOLESCENCE?

CONCEPTS

CONCEPTS

a policy of **producing consumer goods** that **rapidly become obsolete/outdated** and **so require replacing** (artificially limited useful life), achieved by **frequent changes in design, termination of the supply** or **spare parts,** and **the use of non-durable materials.** The term was coined by *Bernard London*, American real estate broker in **1932** with paper '*Ending the Depression Through Planned Obsolescence*'.

There are many subcategories to planned obsolescence that are widely used today in product marketing and sales. *Vance Packard* in 'The Waste Makers' (1960) distinguished: :**obsolescence of desirability** and **obsolescence of function.**

What is
ECOLOGY?

CONCEPTS

CONCEPTS

The **NATURAL SCIENCE** of the **RELATIONSHIPS AMONG LIVING ORGANISMS**, including humans, and their physical environment. Ecology considers organisms at the individual, population, community, and biosphere/eco-system levels. It seeks to understand the vital connections between plants and animals and the world around them.

Ecologists examine how living things depend on one another for survival.

CONCEPTS

What is
RECYCLING?

CONCEPTS

CONCEPTS

The process of **processing (breaking down)** and **reusing waste materials to create new materials** and **objects**. The **recyclability of a material** highly depends on its ability to re-acquire the properties it had in its original state.

Using recycled materials instead of raw/virgin materials in manufacturing a product, can greatly **contribute to saving energy**, as well as **lessening the environmental impacts** – air and water pollution, greenhouse gas emissions and **helping to conserve global resources.**

What is
UPCYCLING?

CONCEPTS

CONCEPTS

CREATIVE REUSE of discarded objects or **materials** (without breaking it down) resulting in **a new product of greater quality or value** than the original.

In other words, **upcycling** is **a process of transforming by-products, waste materials, useless,** or **unwanted products into new materials** or **products**.

It also greatly contributes to minimising the amount of waste sent to landfill, the need for new products and damaging environmental impacts.

What is
ENVIRONMENTAL CULTURE?

CONCEPTS

CONCEPTS

The total of **LEARNED BEHAVIOUR, ATTITUDES, PRACTICES** and **KNOWLEDGE** that a society has with respect to **maintaining or protecting its natural resources, the ecosystem** and **all other external conditions affecting human life.** (*European Environment Agency*)

What is
ECO-SYSTEM?

CONCEPTS

CONCEPTS

also known as **BIOSHPERE** or **BIO-SYSTEM**, is a system that **environments** and **their organisms form through their interaction**.

The ***biotic*** (*any material that originates from living organisms*) and ***abiotic*** (*non-living chemical and physical parts of the environment that affect living organisms and the functioning of ecosystems*) **components** are linked together **through nutrient cycles** and **energy flows**. Ecosystems are **controlled by external** and **internal factors**.

CONCEPTS

What is
CARBON FOOTPRINT?

CONCEPTS

CONCEPTS

The **AMOUNT of CARBON DIOXIDE** and **METHANE EMISSIONS released into the atmosphere** as **a result of the ACTIVITIES** of a particular individual, organisation, or community. A carbon footprint is a calculated value or index that makes it possible to compare the total amount of greenhouse gases that an **ACTIVITY, PRODUCT, COMPANY, INDIVIDUAL** or **COUNTRY adds to the atmosphere**. Carbon footprints are usually reported in tonnes of emissions per unit of comparison. For example, a product's carbon footprint includes the emissions for the entire life cycle (from production along the supply chain to its final consumption and disposal).

What is
LINEAR ECONOMY?

CONCEPTS

CONCEPTS

A **linear economy** refers to the traditional industrial model that follows a '**take, make, waste**' process in which raw materials are extracted, turned into products, and after being used or consumed, the products are typically thrown away as non-recyclable waste (or at most, they are recycled or downcycled). This is our mainstream economic model today.

What is
DEFORESTATION?

CONCEPTS

CONCEPTS

The **decrease in forest areas across the world** that are lost for other uses such as **agricultural farming**, **urbanization**, or **mining activities**. Currently about **31% of Earth's land surface** is covered by forests.

Forests being converted into farming lands is the main driver of forest loss. According to the UN Food and Agriculture Organisation, it causes **at least 50% of global deforestation**, mainly for **oil palm** and **soybean** production. **Livestock grazing** is responsible for almost **40% of global deforestation** (*European Parliament, 2023*).

What is
CAPSULE WARDROBE?

CONCEPTS

CONCEPTS

A **CAPSULE WARDROBE** is a **minimalist collection of clothes** that can be **put together in different ways to cover a variety of outfits and occasions**.

The aim is to have an outfit suitable for any occasion without owning excessive items of clothing.

The concept was introduced in **1970s** by *Susie Faux*, an owner of London-based boutique called 'Wardrobe'. She defined it as '***a limited number of essential or staple items that you can wear for multiple seasons***'.

RECIPES

What is
TOFU made of?

RECIPES

RECIPES

TOFU, or *bean curd*, is a popular food derived from **SOYA**. It is made by acurdling fresh soya milk, pressing it into a solid block and then cooling it, in much the same way that traditional dairy cheese is made by curdling and solidifying milk.

Fermented tofu (*furu*) has been documented in **China** since the late **16th century**. The savory product is used as a condiment to accompany rice or porridge.

What is
VISCOSE made of?

RECIPES

RECIPES

Viscose is made from **WOOD PULP**, typically from trees such as pine, beech and eucalyptus. The manufacturing process of viscose includes dissolving the wood into a pulp solution, which is then washed, cleaned and bleached. As manufactured regenerated cellulose fiber, it is semi-synthetic material.. The production of viscose has been associated with negative health effects on the workers, due to exposure to chemicals required in the process – **sodium hydroxide** (burns), **carbon disulfide** that has been linked to incidence of heart disease, birth defects and cancer among workers and the surrounding communities of viscose factories.

What is
TEA BAG made of?

RECIPES

RECIPES

The **first tea bags** were made from **GAUZE**. **Today**, tea bags are made from **bleached PAPER**, **PLASTIC**, or **NYLON**. This is partly because these types of materials can withstand hot water while also showing you the tea inside. Often glue and other harmful chemicals are used for sealing tea bags.

When looking for tea bags, it's **important to read the packaging** and look for materials that are safe for both you and the environment. Avoid tea bags made from polypropylene or other petroleum-based plastics, and instead opt for those made from plant-based materials e.g. corn-starch, or natural fibers such as cotton or silk, or drink your tea loose.

What is
FAKE MEAT made of?

RECIPES

RECIPES

It falls into two categories: **PLANT-based** and **CELL-based PROTEINS**. The **plant-based MEAT** is made by extracting the protein from plant foods, e.g. **PEA, SOY, WHEAT,** and **MUSHROOMS**. Additives are needed to make these products look and taste like traditional meat. Often these products are highly processed, with high sodium and caloric value.
Cell-based or **lab-grown MEAT** is **NOT VEGAN**, as it is composed of the same cells and tissues as conventionally produced meat. It starts with cells taken from fertilized egg, or a special bank of stored cells or tissue from a living animal. The cells are then mixed with a broth of nutrients that cells need to grow and divide.

RECIPES

What is
VEGAN CHEESE
made of?

RECIPES

RECIPES

Vegan cheese can be made with **components derived from vegetables**, such as **PROTEINS, FATS** and **MILKS** (plant milks, e.g. almond, cashew). It can also be made from **SEEDS**, such as sesame, sunflower, **NUTS** (cashew, pine nut, peanuts, almond) and **SOY BEANS**; other ingredients are coconut oil, nutritional yeast, tapioca, rice, potatoes and spices.

Vegan cheeses range from soft fresh cheeses (e.g. *Mozzarella, Ricotta, cream cheese*) to aged and cultured hard grateable cheeses (e.g. *Cheddar, Gouda, Parmesan*).

What is
MAYONNAISE
made of?

RECIPES

RECIPES

An emulsion of **OIL, EGG YOLK,** and an **ACID**, either **VINEGAR** or **LEMON JUICE**. There are many variants using additional flavourings. The colour varies from near-while to pale-yellow, and its texture from a light cream to a thick gel. Home-made mayonnaise should be used within 2 weeks of making. Factory-made mayonnaise has additional stabilizers and preservatives to pro-long the shelf life of the product.

According to culinary historians, **mayonnaise** was first prepared by a **French chef** of the Duke de Richelieu in **1756** as a part of a victory feast for capturing the Port Mahon located on the island of Minorca, Spain.

What is
TAKE-AWAY
COFFEE CUP
made of?

RECIPES

RECIPES

Disposable coffee cups are made with a range of materials (including the worst possible material Styrofoam). Today, **most disposable paper cups are made of around 90 to 95% paper**, while **an additional 5% is made up of a thin plastic coating of polyethylene**, a petroleum-based product.

The plastic polyethylene coating is what makes the paper cup waterproof and able to hold liquids in the first place. This applies also to all the other paper-based take-away containers (e.g. take-away food).

What is **INSTANT**
COFFEE made of?

RECIPES

RECIPES

Instant coffee is made from **REAL COFFEE BEANS**. The soluble (dissolving) and volatile (evaporating) contents of the beans are extracted. Then the water is removed, so powder or concentrated soluble coffee powder is left over. It's essentially been dehydrated for our convenience.

It has similar health benefits as regular coffee and a **little less caffeine.**

RECIPES

What is
TOILET PAPER
made of?

RECIPES

RECIPES

Most commercially available toilet paper products are made from **WOOD PULP**. Other materials used in manufacturing include **water, chemicals for breaking down the trees into usable fibre**, and **bleaches**.

ECO-FRIENDLY toilet paper is typically made from either **recycled paper, bamboo,** or **hemp** (2024). These materials are chosen for their sustainable growth and harvesting practices, lower environmental impact compared to traditional wood pulp, and their biodegradability.

What is **UMBRELLA FABRIC** made of?

RECIPES

RECIPES

FABRIC most used today for umbrellas is **NYLON**, for its durability and water-resistant qualities.
POLYESTER is another commonly used material for umbrellas. Polyester is not naturally water-proof, but it can be made water-resistant by applying special coating to the polyester fabric's surface. These materials are also used in manufacturing **camping tents, light-duty covers, clothing**, and **bags**.

Polyester and Nylon has been linked to causing skin irritation, allergies and other health effects if worn, and they are not as environmentally-friendly due to their **non-biodegradable nature**, as well as their **polluting manufacturing processes**.

What
ENVIRONMENTAL POLLUTION
consists of?

RECIPES

RECIPES

Pollution is the introduction of **contaminants into the natural environment** that cause adverse change. Pollution can take **the form of any substance** (solid, liquid, or gas) **or energy** (such as radioactivity, heat, sound, or light). Pollutants can be either foreign substances/energies or naturally occurring contaminants. The word pollution generally implies that **the contaminants have an anthropogenic source** – a source **created by human activities**, such as manufacturing, extractive industries, poor waste management, transportation or agriculture. Major forms of pollution include *Air, Water, Soil (Land), Noise, Electromagnetic, Plastic, Radioactive, Thermal, Light* and *Visual* pollution.

What is
SOIL made of?

RECIPES

RECIPES

The basic components of soil are **MINERALS**, **ORGANIC MATTER** (plant or animal tissue in various stages of decomposition), **WATER** and **AIR** (Nitrogen, Oxygen, CO_2). The typical soil consists of approximately 45% minerals, 5% organic matter, 20-30% water, and 20-30% air. The presence of living organisms such as bacteria, fungi, worms, and insects is also part of the soil composition. Soil is a living system.

FACTS

How much **FOOD** is **WASTED** globally?

FACTS

FACTS

1/3 OF THE FOOD IN THE WORLD IS WASTED. The causes of food waste or loss are numerous and occur throughout the food system, **during production, processing, distribution, retail** and **food service sales**, and **consumption.**

Globally, **households are the largest contributors to food waste – up to 61%**, followed by food service providers - 26%, and retail - 13% (UN Environment Programme, 2021)

How many times can you recycle **PAPER**?

FACTS

FACTS

4-6 TIMES. Paper cannot be recycled indefinitely because the fibres lose their paper making qualities. To be recycled properly - paper or paper products must not contain metal, plastic, or other materials, **it has to be clean** and not contain food residues or other substances.

Which **MATERIALS** you can **RECYCLE ENDLESSLY**?

FACTS

FACTS

METALS (aluminium, steel, copper) and **GLASS**.

How many times can you recycle **PLASTIC**?

FACTS

FACTS

Plastic can be recycled **7-9 times** before it is no longer recyclable, yet it also depends on the quality of the recycled material.

Globally, **only 9% of plastic waste is recycled** while 22% is mismanaged (OECD, 2022). Most plastic pollution comes from inadequate collection and disposal.

FACTS

How long does it take for a **BANANA PEEL** to decompose?

FACTS

FACTS

The peels of banana take **up to 2 years to decompose completely**.

Bananas are one of the most popular and widely consumed fruits in the world. They also are **the 4th most grown crop in the world**, trailing only rice, wheat and corn.

The qualities of banana peels, especially their durability have been of high interest among scientists searching for new alternatives for plastic packaging.

How long does it take for a **DIAPER** to decompose?

FACTS

FACTS

it takes **500 years for a single-use diaper to degrade** (EPA, 2014). Single-use/disposable diapers are made of paper, plastic and absorbent polymers, and contaminated with human waste can remain in the environment for long periods. Currently only 0.3% of used diapers in the world are recycled (data from 2020). In Europe, only a few countries have technologies to recycle used diapers, including England, Italy and the Netherlands.

There are some alternatives on the market, yet even **biodegradable diapers** fully decompose **within 50 years**, which is also a considerably long time.

In which bin do you throw out a **CHEWING GUM**?

FACTS

FACTS

GENERAL WASTE. The gum is made of rubber-like substance that is hard to decompose, it's not bio-degradable and non-recyclable.

Chemicals present in the core of the gum are flavouring substances, sweeteners, food colourings, preservatives and polymer gum base (synthetic rubber - polyvinyl acetate).

Which edible **PRODUCT** never spoils?

FACTS

FACTS

HONEY is known to be one of the only foods that can last forever. Its low moisture content keeps bacteria from surviving. Also, honey is acidic enough to ward off most of the bacteria and organisms that spoil other food. And, the bees add their own enzymes to honey, and these enzymes produce hydrogen peroxide.

FACTS

Which **ITEM** is the most **RECYCLABLE**?

FACTS

FACTS

ALUMINIUM CANS are one of the most recyclable materials. They are 100% recyclable and can be reprocessed over and over again. **Turning recycled aluminium cans into new cans uses 95% less energy than making new ones**. According to *The Aluminum Association* (the US), on average aluminium cans contain 73% of recycled content.

How long do **SOLAR PANELS** last?

FACTS

FACTS

The industry standard for most solar panels lifespans is **25 to 30 years**. Most reputable manufacturers offer production warranties for 25 years or more. The average **break even point for solar panel energy savings occurs 6 to 10 years after installation**. Given the typical degradation rate of about 0.5-0.9% per year, **a 10-year old solar panel can be expected to keep 90-95% of its original efficiency**.

Factors such as **weather conditions** (clouds, hot or cold temperatures, where **+25C** is the optimal temperature, rain and snow), **quality of the installation**, and **cleanliness** all affect solar panels and can make them deteriorate at a quicker rate.

What are **ALTERNATIVE MATERIALS** that **PAPER** can be made from?

FACTS

FACTS

Normally paper is made from wood and/or recycled paper products. However, paper can also be made from **cotton, wheat straw, sugar cane waste, flax, bamboo, jute,** or **hemp**.

Also, **manure/poo of certain animals is being used to make paper**. For example, since elephants are herbivores same as cows (or sheep or horses), their manure is essentially **raw cellulose from plant fibres** (that need to be cleaned, dehydrated, steamed and pulped) can be used for making paper.

Why is **STYROFOAM** considered bad for the environment?

FACTS

FACTS

STYROFOAM is a type of extended polystyrene foam that is commonly used **for insulation** and **packaging** (often single-use). **Styrofoam does not biodegrade**. Also, the material breaks apart easily, posing a threat to the environment in a form of **small pieces that can end up in the waterways** or **be eaten by animals that mistake it for food**.

Due to its lightweight (it's composition can be up to 98% air), it is not an economically viable loose material for recycling companies., although **it can technically be recycled**. As a result, it often ends up in landfills.

SUSTAINABLE LIVING

What is
a **COMMUNITY GARDEN**?

SUSTAINABLE LIVING

SUSTAINABLE LIVING

A **COMMUNITY GARDEN is any piece of land gardened by a group of people**, utilizing either individual or shared plots on private or public land.

Community gardens **provide fresh products** and **plants** as well as **contribute to a sense of community** and **connection to the environment** and **an opportunity for satisfying labour and neighbourhood improvement**. They are publicly functioning in terms of ownership, access and management, and contribute to the urban agriculture movement. Most recently, community gardens have seen a global comeback.

What is
a **NET-ZERO BUILDING**?

SUSTAINABLE LIVING

SUSTAINABLE LIVING

A **NET-ZERO Building**, or a **ZERO ENERGY Building produces enough renewable energy to meet its own annual energy consumption requirements**, thereby reducing the use of non-renewable energy in the building sector. A building with net zero energy consumption uses **renewable energy sources offsite**, technology such as **heat pumps, high efficiency windows** and **insulation**, and **solar panels**.

The goal is that **these buildings contribute less overall greenhouse gas** to the atmosphere during operation than similar non-ZNE building.

What is
ECO-TOURISM?

SUSTAINABLE LIVING

SUSTAINABLE LIVING

ECO-TOURISM is a form of tourism marketed as 'responsible' travel **using sustainable transport to natural areas**, **conserving the environment, and improving the well-being of the local people**. Eco-tourism typically involves **travel to destinations** where **flora, fauna,** and **cultural heritage** are the primary attractions. Eco-tourism is intended to offer tourists **an insight into the impact of human beings on the environment** and to **foster a greater appreciation of our natural habitats**. An integral part of eco-tourism is the promotion of recycling, energy efficiency, water conservation, and the creation of economic opportunities for local communities.

What is
PERMACULTURE?

SUSTAINABLE LIVING

SUSTAINABLE LIVING

PERMACULTURE is an **approach** to **land management** and **settlement design** in a **self-sufficient** and **sustainable way**.

Permaculture entails **designing** and **maintenance** of agriculturally productive ecosystems that draws **inspiration from nature:** in developing **synergetic farming** based on **crop diversity, resilience, natural productivity**, and **sustainability**. and looking at plants and animals in all their functions, rather than treating any area as a single product system.

SUSTAINABLE LIVING

How is **BUTTER** made?

SUSTAINABLE LIVING

SUSTAINABLE LIVING

The butter is made by **churning milk or cream to separate the fat globules from the buttermilk**. **Salt has been added to butter since antiquity to help preserve it.**

Milk is made up of fats and liquids. When it is **shaken or beaten for a long time**, the solids break apart from the liquids and attract to each other. The end result is a solid fat-based product, butter, and a liquid with a low amount of fat in it, buttermilk.

What is **MINDFUL CONSUMPTION**?

SUSTAINABLE LIVING

SUSTAINABLE LIVING

The practice of **using awareness of sustainability issues to inform purchasing decisions** – from everyday items to long-term investments.

MINDFUL CONSUMPTION is a combination of a **mindful mindset** and **a behaviour**: **a mindset for caring for the self, community** and **nature**, which translates into consumer behaviour of tempering **acquisitive** (greedy need to have something), **repetitive** and **aspirational** (strong desire to have something) **consumption** (Sheth et al. 2011).

What is **VERTICAL GARDENING**?

SUSTAINABLE LIVING

SUSTAINABLE LIVING

Vertical gardening is the **practice of growing crops in vertically stacked layers**. It often incorporates controlled-environment agriculture, which aims to **optimize plant growth**, and **soil-less farming techniques** such as

- ***hydroponics*** (growing plants with nutrient-rich water instead of soil),
- ***aquaponics*** (combining growing fishes and plants together, with fish waste being the main nutrient), and
- ***aeroponics*** (relies on nutrient-rich mist, roots never lack oxygen).

Vertical gardening offers a practical solution for **maximizing space** and **harnessing nature's power**.

What do you get in a **ZERO WASTE SHOP**?

SUSTAINABLE LIVING

SUSTAINABLE LIVING

also known as '*no packaging shop*' is **a concept of a shop** where **products are sold in bulk, sold without packaging** and **all products that go out of date before being sold must have a destination** (e.g. going to food banks or into composts).

A zero waste shop enables customers to live a more zero waste lifestyle through **eliminating packaging** and **encouraging the use of containers from home to fill and refill with bulk whole foods**, **natural beauty** and **cleaning products**. If you ever shopped in the bulk food aisle, you're already familiar with the concept.

SUSTAINABLE LIVING

What is
an **EARTHSHIP**?

SUSTAINABLE LIVING

SUSTAINABLE LIVING

An **EARTHSHIP** is a type of **house built with natural and recycled materials with energy conservation in mind**. It is **designed to produce water, electricity**, and **food for its own use**. Materials needed for an Earthship typically include discarded tyres, aluminium cans, glass bottles, local earth, cement, and reclaimed wood among others.

This style of architecture developed in the late 20th century to early 21st century by architect *Michael Reynolds*. The designs have been used around the world, and about ***3,000 Earthships have been built***, though most are located in ***the United States*** (*Britannica, 2024*).

What is
a **SOLIDARITY FRIDGE**?

SUSTAINABLE LIVING

SUSTAINABLE LIVING

The **Solidarity Fridge** (also known as **Community Fridge)** initially was **a project to fight against food waste.** 40% of the food products in the world don't even get sold, whether it is due to less than perfect looks, not being part of the latest food trends, or being too close to the sell by date.

Now the concept has developed into a community space that **brings people together to share food, meet up, learn new skills** and **prevent fresh food from going to waste**. They're open to public and anyone can share or take food, including surplus from supermarkets, local food businesses, producers, households and gardens.

What is
SLOW FASHION?

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SLOW FASHION is an aspect of **sustainable fashion** and a concept describing the opposite to fast fashion, part of the 'slow movement' advocating for clothing and apparel manufacturing in respect to people, environment and animals.

Slow fashion movement **prioritizes quality and sustainability over speed and low costs**. This approach emphasizes **careful production processes** and **fair treatment of people working in the industry.**

What is
NATURE CONSERVATION?

SUSTAINABLE LIVING

SUSTAINABLE LIVING

NATURE CONSERVATION is the **moral philosophy** and **conservation movement** focused on protecting species from extinction, maintaining and restoring habitats, enhancing ecosystem services, and protecting biological diversity. It is **a set of practices designed to preserve the current quantity and quality of natural capital** for future generations.

It requires the **sensible use of all Earth's natural resources: water, soil, minerals, wildlife,** and **forests**. People who care about conservation try to preserve natural resources so they will still be around in the future.

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What was **THE FIRST EVER TEA BAG** made from?

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The first patents for tea bags appeared already in 1903, however, it was **Thomas Sullivan**, an American tea and coffee importer, that started a trend in **1908**. The importer shipped his tea in **SILK BAGS.** Legend has it, that people started using his silk bags to brew their tea because it was easier.

In 1929 **Adolf Rambold** invented the first tea packaging machine for a German company. Even then, tea bags looked different, they looked more like small sacks. It wasn't until 1944 that the tea bags as we know them now were invented and used for mass distribution.

What is the name of the **WORLD'S GREENEST FOOTBALL CLUB**?

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FOREST GREEN ROVERS, based in Gloucestershire, England.

What makes them green, i.e. vegan and carbon-neutral?

The club's park is powered by solar panels and wind turbines, the club uses natural seaweed-based treatments for the pitch, it has electric car charging points, water recycling, and an entirely vegan menu for players and fans.

Which **CITY** is the **European Green Capital 2025**?

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VILNIUS, Lithuania. The award is given by the European Commission each year to a European city based on its environmental record. The award was launched in **2008**, and the **first award** winner was **Stockholm** in **2010**. The assessment of the selection is based on **7 indicators**:
1. Air Quality,
2. Water,
3. Biodiversity, Green Areas & Sustainable Land Use,
4. Waste & Circular Economy,
5. Noise,
6. & 7. Climate Change - Mitigation and Adaptation.

What is **SHINRIN-YOKU**?

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also known as FOREST BATHING, is a **practice or process of therapeutic relaxation** where one **spends time in a forest or natural atmosphere**, focusing on **sensory engagement to connect with nature**.

The term emerged in ***Japan*** in the **1980s** as a physiological and psychological exercise. The concept and practice is not new. Many cultures have long recognised the importance of the natural world to human health.

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What is
FAST FASHION?

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FAST FASHION is a **BUSINESS MODEL** of replicating recent high-fashion designs, mass-producing them at a low cost, and bringing them to retail quickly while demand is at its highest. Fast fashion is characterised by **cheap, trendy, and mass-produced clothing that generates large amounts of waste** and carbon emissions.
Fast fashion has devastating impacts on the environment, e.g. habitat degradation, proliferation of chemicals and microplastics in waterways. It is also often linked to the use of **cheap labour** sourced in countries where workers often have to work **long hours** in **bad working conditions, being exposed to toxic chemicals**, and **not being paid fairly**.

What is **OVER CONSUMPTION**?

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Excessive consumption or **use of goods and services (energy, land, water** or **materials) that cause harm** or **detrimental effects to humans and/or the environmen**t, namely by exceeding the carrying capacity and life supporting systems of the planet and its eco-systems.

Although the period after *World War II* is often identified as the beginning of the immense eruption of consumption across the industrialised world, the historian **William Leach** locates its roots in ***the United States*** around the turn of the 20th century.

What is
the most **CULTIVATED CROP** in the world?

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GRAINS, which include crops like WHEAT, RICE and CORN, with **WHEAT** being the most widely grown crop overall (National Geographic, 2024).

Crops are plants, or products made from plants, that are grown and harvested **for subsistence** or **for profit.** Crops are typically divided into **6 categories**: **food crops** (human consumption), **feed crops** (feeding livestock), **fiber crops** (processed into textiles, or paper products), **oil crops** (human consumption & industrial use), **ornamental crops** (for landscaping and gardening), and **industrial crops** (manufacturing processes, machines or fuel production) (National Geographic, 2024).

What is **ECO-ANXIETY**?

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also known as '*eco-distress*' or '*climate-anxiety*' is defined as **an extreme worry about current and future harm to the environment caused by human activity and climate change**. The condition is not a medical diagnosis, yet the effects can be ranging from mild stress to clinical disorders like depression, anxiety, post-traumatic stress disorder and suicide, and maladaptive coping strategies such as intimate partner violence and substance misuse.

The condition has become especially common among children and young people (Clayton, 2020. Climate anxiety: Psychological Responses to Climate Change).

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What is
GREENWASHING?

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GREENWASHING is the act of **making false or misleading statements about the environmental benefits of a product** or **practice**.

Commonly it is a form of **advertising or marketing** that deceptively uses green PR and green marketing to persuade the public **that an organisation's products, goals,** or **policies are environmentally friendly.**

What is
SUSTAINABILITY?

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Sustainability is the **long-term viability of a community,** set of social institutions, or societal practice. **Sustainability** usually has **3 dimensions: environmental, economic** and **social**. Sustainability is generally understood as a form of **inter-generational ethics** in which the environmental and economic actions taken by present persons do not diminish the opportunities of future persons to enjoy similar levels of wealth, utility, or welfare.

The concept of sustainability, or *Nachhaltigkeit* in *German* was originally applied to maintaining **forestry** by **Hans Carl von Carlowitz** (1645-1714).

On what **TYPE of PAPER RECEIPTS** are commonly printed on?

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Receipts are typically printed on a **THERMAL PAPER**, which is a special type of paper that is coated with a chemical called **BISPHENOL-S** (**BPS**) or **BISPHENOL-A** (**BPA**) that changes colour when exposed to heat. BPS or BPA from thermal paper can be absorbed into the body **through skin**. The chemicals have been shown to be **hazardous to reproductive systems in humans** and **animals**. The BPS is **also** used as a **substance to lengthen colour life in fabrics**, and as **a food packaging preservative**.

The EU has enforced a ban on BPA in thermal paper since January 2020, **limiting BPA content to 0.02%** by weight, effectively banning its use.

What is
ENVIRONMENTAL PSYCHOLOGY?

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Environmental psychology is a branch of psychology that studies **the relationship between people** and **the physical features of daily life environments** – both built and natural – and their **influence on HOW people feel, think**, and **behave**, and **WHY**, with an aim to enhance human well-being and to improve people-environment relations, as well as to guide predictions about the relationships between human beliefs, motivations, perceptions and behaviour.

'*How strong is people's connection to nature, and is this connection to nature related to people's engagement in environmentally significant behaviours?*' would be one of the questions environmental psychology would seek answers to.