Personal Consumption and Climate Change



Images & Objects

Personal Consumption and Climate Change

Toolkit 2 in the Images and Objects – Active Methodology Toolkit series

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Structure of this toolkit

This toolkit is structured into 7 main sections.

1.	**INTRODUCTION**	The introduction explains the structure of this toolkit, the age and grade relevance and the target learning objectives. It also presents a brief history on the original development of this toolkit.
2.	**BACKGROUND**	The background contains information about climate change, including climate scepticism and personal consumption as the main topic in this toolkit.
3.	**USING the TOOLKIT**	This section provides a brief explanation on how to use this toolkit and the activities contained within. It also explains the learning methodologies employed in this toolkit.
4.	**LEARNING ACTIVITIES**	The learning activities contain the primary teaching materials of this toolkit. These include eight activities that support learning about climate change and personal consumption.
5.	**REFLECTION and ASSESSMENT**	This section presents a reflection and assessment process that can be used after every activity in this toolkit and provides an opportunity for learners to strengthen their learning, recognise changes in their thinking and identify opportunities for future action.
6.	**REFERENCES**	This section provides a list of references used in this toolkit.
7.	**RESOURCES**	This section provides a starter set of learning resources to use with the activities presented in this toolkit.

Age and Grade relevance

The toolkit targets educators and facilitators in the upper levels of primary education and in secondary education. The content and activities in this toolkit are targeted for learners from the age of 10 and up but are particularly relevant for learners in lower and upper secondary school. Facilitators working in both formal (at different levels, such as higher education) and in non-formal education will be able to adapt these activities and content for use with their learners.

The learning approaches in this toolkit aim to provide a flexible and adaptable set of methods that can be used with all ages. The activities are designed to support and encourage facilitators to integrate some of the concepts of sustainable development into teaching and learning. It focuses on using photographs, strategic questioning, group discussions and real-world connections to explore the themes of personal consumption, climate change and responsible living. By adjusting the types of strategic questions that are used, it is possible to match the level of discussions and reflection to be relevant with different learners' abilities.

Learning Objectives

This toolkit aims to stimulate learners' abilities to explore the concepts of personal consumption, climate change, and climate scepticism. The activities within this toolkit raise awareness about environmental concerns and encourage learners to question the way they think, the values they hold and the decisions they make in the context of sustainable development. Such willingness to source correct information, appreciate the perspectives of others, reflect on the outcomes and impact of our actions, and embrace change is required in order for us to modify our way of living and reflect a responsible approach to everyday life decisions that foster sustainability. The activities also promote life-long learning competencies in communication, collaboration, critical thinking and taking action for the environment. The activities defined in this toolkit specifically target the following learning objectives:

- ✔ **Exploring concepts of personal consumption and climate change:** Provides a mix of methodologies and materials to support a multidisciplinary exploration of the topics personal consumption and climate change, including related concepts such as climate scepticism, complexity and responsible living.
- ✔ **Making personal connections to our consumption patterns:** Stimulate critical thinking about one's own consumption choices using strategic questioning and exploring the relationship they have to climate change.
- ✔ **Collaborating and creating common understanding of consumption and climate challenges:** Encourage collaborative learning about climate challenges through investigation, active experience, and transformative learning.
- ✔ **Identifying interconnections between consumption and climate change:** Examine climate change through a holistic perspective and apply a collaborative-problem solving approach towards identifying interconnections and leverage points for transformative learning and change.
- ✔ **Taking action to strengthen sustainable personal consumption choices:** Engage learners in applied and active learning approaches to strengthen real-world relevance and foster competence development.

Assessment for Learning is also used and provides an opportunity for learners to consolidate their learning, recognise changes in their thinking and identify opportunities for future action. Assessment should focus not only on what learners know, but also on how they think, communicate, collaborate and apply their learning in meaningful contexts.

Original Development of this Toolkit

The Images and Objects – Active Methodology Toolkit series started nearly 20 years ago under the Consumer Citizenship Network (CCN). This was a large interdisciplinary Erasmus-funded partner network that stimulated and coordinated research about consumer education and consumer citizenship, contributing to its growth as a relevant, interdisciplinary theme in primary and secondary education. To support this work, the network prepared and carried out teacher training seminars with a particular focus on active teaching and learning approaches. As the need for material grew, the idea for a toolkit series came to life.

Long after CCN concluded as a network (2003–2009), the series remains a widely used and effective teaching and learning resource among teachers and facilitators, and the series continues to expand. The series has carried forward, first under the Erasmus-funded academic network, the Partnership for Education and Research about Responsible Living (PERL) (2009-2015), before being permanently housed within the Centre for Collaborative Learning for Sustainable Development (CCL from 2016). Several of the original task group members remain involved in developing the series further, bringing new ideas about themes, methodologies and learning approaches, creating content, providing feedback, disseminating and translations.

From the very first Images and Objects Toolkit published in 2008, the series today contains 14 toolkits, presenting different themes of sustainable development and promoting a variety of active teaching and learning methodologies, now including video resources for both teachers and learners. In recent years CCL, with the support of partners from the International Partner Network of the UNESCO Chair on Education for Sustainable Lifestyles, have started updating and renewing the earlier toolkits, starting with a reedition of the first Images and Objects toolkit in 2022. The reedition of this toolkit, Personal Consumption and Climate Change, includes updated information about active learning and teaching methods, climate change – including a section on the increase of climate scepticism – and some of the activities have been expanded on and new ones have been included. As the series evolved, a more standardised look and format has also been developed, and the reedition has been updated to this formatting.

Please scan the QR-code to download other toolkits in the series. We recommend having a look at Active Methodology Toolkit #7, Why Buy? The symbolic value of consumption, as it is closely connected to the current toolkit and support each other in content, even though the methodologies are different.

The complete Active Methodology Toolkit series is available both in electronic and print formats in English and Norwegian. Additionally, selected toolkits have been translated into nine other languages. They are freely available on the CCL website together with other teacher and learner resources.

Climate Change

Climate change refers to long-term changes in Earth's climate system, including the ongoing rise in global temperatures and associated changes in weather and climate patterns. Scientists have measured a rise in global temperatures of about 1.1°C since the late 1800s, and there is now overwhelming evidence that the planet is warming (IPCC, 2023; NASA, 2024). Measurements from weather stations, satellites, glaciers, oceans, and ice cores all show the same trend (NASA, 2024). The Intergovernmental Panel on Climate Change (IPCC), which reviews thousands of scientific studies conducted around the world, states that it is unequivocal—meaning there is no reasonable doubt—that the climate is warming and that human activities are the primary cause (IPCC, 2021; IPCC, 2023).

The main reason for this warming is the increase in greenhouse gases in the atmosphere. When humans burn fossil fuels such as coal, oil, and natural gas, large amounts of carbon dioxide are released into the air (IPCC, 2021). Farming, deforestation, and some industrial processes also release greenhouse gases such as methane and nitrous oxide (IPCC, 2023). These gases act like an extra blanket around Earth, trapping more heat from the Sun and causing temperatures to rise (NASA, 2024). Scientists have concluded that human activities are responsible for virtually all of the observed global warming since the nineteenth century (IPCC, 2021; IPCC, 2023).

The effects of climate change are already being seen around the world. Many regions are experiencing more frequent and intense heatwaves, heavier rainfall, longer droughts, melting glaciers, shrinking Arctic sea ice, and rising sea levels (IPCC, 2021; NASA, 2024). These changes can affect ecosystems, agriculture, water supplies, and human health (IPCC, 2023). Scientists have also found that climate-related extreme weather events become more likely and more severe as global temperatures increase, meaning that even relatively small increases in warming can have significant consequences for people and nature (IPCC, 2023).

Looking ahead, future climate conditions will depend largely on the choices humans make today. If greenhouse gas emissions are reduced quickly and substantially, warming can be limited and some of the most serious impacts can be avoided (IPCC, 2023). However, if emissions remain high, scientists project greater warming, more extreme weather events, continued sea-level rise, and increasing risks to communities and ecosystems throughout this century (IPCC, 2021; NASA, 2024). Although some changes are now unavoidable, the scientific evidence shows that actions taken today can still make a major difference to the future climate experienced by today's young people and future generations (IPCC, 2023).

The **Intergovernmental Panel on Climate Change (IPCC)** is often described as one of the most comprehensive scientific assessment efforts ever undertaken. Established by the United Nations in 1988, the IPCC does not conduct its own experiments. Instead, it brings together thousands of scientists from around the world to review and evaluate the findings of many thousands of published studies on climate change. Its reports are written, checked, and reviewed through multiple rounds of expert and government review, making them a powerful example of scientific consensus-building. While science is always open to new evidence and revision, the IPCC's assessments represent the most extensive global effort to examine, compare, and summarise climate research across countries, disciplines, and perspectives. For this reason, its conclusions are widely regarded as the most authoritative scientific understanding of climate change available today.

Personal Consumption, Lifestyles and Climate Change

Climate change is not only influenced by governments, businesses, and industries. The choices made by individuals and households also play an important role. Every day, people make decisions about what they eat, how they travel, what they buy, how much energy they use, and what they throw away. These choices create demand for products and services, which in turn affects how resources are used and how greenhouse gases are produced. According to the Intergovernmental Panel on Climate Change (IPCC), changes in individual and household consumption patterns have the potential to reduce global greenhouse gas emissions by between 40% and 70% by 2050 when supported by appropriate infrastructure and policies (IPCC, 2022).

Personal consumption refers to the use of goods and services by individuals and households. However, the impact of a product goes far beyond the moment it is purchased. Raw materials must be extracted, products must be manufactured and transported, energy is often required during use, and waste must eventually be managed or disposed of. This means that every item we use – from a mobile phone to a T-shirt or a meal – has an environmental footprint. Sustainable consumption encourages people to think about the full life cycle of products and to consider their effects on the environment, society, and future generations (UNEP, 2023; IPCC, 2022).

Food choices provide a good example of how lifestyle can influence climate change. Producing food requires land, water, energy, and transportation. Some foods, particularly those that involve intensive livestock production, generally have a larger greenhouse gas footprint than many plant-based foods. Reducing food waste, choosing seasonal products where possible, and incorporating more plant-based meals into diets can significantly reduce emissions while also providing health benefits (IPCC, 2022; Poore & Nemecek, 2018). Importantly, sustainable diets do not require everyone to eat the same foods; rather, they encourage informed choices that balance nutritional, environmental, and cultural considerations.

Transport and travel decisions also affect climate change. Cars, airplanes, and other forms of transport often rely on fossil fuels that release carbon dioxide into the atmosphere. Walking, cycling, using public transport, sharing journeys, or choosing lower-emission vehicles can reduce an individual's carbon footprint (IPCC, 2022). Similarly, energy choices at home – such as reducing heating and cooling demands, improving insulation, using energy-efficient appliances, and conserving electricity – can lower both emissions and household energy costs (International Energy Agency, 2023).

Lifestyle is about much more than individual purchases. It includes the habits, values, and routines that shape everyday life. The clothes we wear, the technology we use, how often we replace products, how we spend our leisure time, and how we interact with others all influence resource use. In many societies, consumption is sometimes linked to status, convenience, or personal identity. Developing sustainable lifestyles involves thinking critically about whether purchases are truly needed and considering alternatives such as repairing, reusing, borrowing, sharing, or buying second-hand items. These actions can reduce waste and help conserve valuable natural resources (IPCC, 2022; UNEP, 2023).

Understanding the connections between lifestyle choices and climate change is an important first step towards becoming an informed and responsible global citizen. However, awareness alone is not enough. The challenge for all of us is to explore how our daily decisions align with the kind of future we want to create. Throughout the learning activities that follow, you will investigate your own patterns of consumption, examine their environmental impacts, and identify opportunities to make more sustainable choices. The goal is not to achieve perfection but to develop the knowledge, skills, and critical thinking needed to make choices that contribute to a healthier, fairer, and more sustainable world for both present and future generations (IPCC, 2022; UNESCO, 2020).

"The greatest threat to our planet is the belief that someone else will save it."

– Robert Swan, polar explorer and environmental leader

You may not be able to solve climate change on your own, but every choice you make sends a signal about the kind of future you want. When millions of people choose more sustainable ways of living, those small actions add up to powerful change.

Climate Scepticism

Climate change is an important topic, but not everything you see online, on social media, or in discussions is accurate. Sometimes people express climate scepticism by claiming that climate change is not happening, that humans are not responsible, or that scientists strongly disagree about the evidence. When you come across these claims, it is important to think critically. Ask questions such as: Who is providing this information? What evidence do they use? Is it supported by scientific research? Reliable information usually comes from trusted scientific organisations, universities, and experts who use evidence gathered from many studies.

Media messages can sometimes be misleading because dramatic or controversial opinions attract attention. Social media posts, videos, and news articles may focus on single events, such as a cold winter day, and use them to question global climate change. However, scientists study long-term patterns across the entire planet, not just individual weather events. Learning the difference between weather (what happens today or this week) and climate (patterns over many years) can help you understand why some sceptical arguments are misleading.

To counter climate scepticism, it is helpful to build your knowledge from factual sources. The scientific evidence shows that Earth's average temperature is increasing and that human activities, especially the burning of fossil fuels, are a major cause. By checking information carefully, comparing different sources, and relying on evidence rather than opinions alone, you can become a responsible and informed citizen. Critical thinking does not mean rejecting information – it means examining the facts and making decisions based on the best available evidence.

Note: **Do you want to know more about how to counter climate scepticism?**



Try out The Scientific Guide to Global Warming Skepticism by Dr. John Cook (University of Melbourne and founder of Skeptical Science Inc.).
https://skepticalscience.com/The-Scientific-Guide-to-Global-Warming-Skepticism.html

For a more engaging classroom alternative, try out his alter ego the Cranky Uncle in the book Cranky Uncle vs. Climate Change: How to Understand and Respond to Climate Science Deniers (2020) and the app-based game, which can be supported with the Teachers' Guide to Cranky Uncle.
https://crankyuncle.com/teachers-guide-to-cranky-uncle/

Critical Thinking and Action

Critical thinking begins with curiosity, the willingness to question, explore and connect ideas to better understand the complexity of the world. Within education for sustainability, it is recognised as a key competence that enables learners to interpret information analytically, appreciate different perspectives and make informed decisions in situations characterised by uncertainty and change. By encouraging learners to question what they observe and experience, teachers create opportunities for them to recognise that environmental and social challenges are interconnected and shaped by values, systems and relationships that extend far beyond individual choices.

In the context of climate change and personal consumption, critical thinking encourages learners to examine the wider systems that influence everyday habits and decisions. Questions such as *What are the environmental and social consequences of what I consume? Why do I make these choices? How could they be different?* invite reflection on the relationships between daily life, global production and consumption systems, and environmental sustainability. Through this process, learners begin to identify patterns, connections and interdependencies, developing a systemic understanding of the challenges they face while recognising that their own choices can contribute to positive change.

Critical thinking develops progressively through purposeful inquiry. Initial questions such as *What is happening? can lead to deeper reflection through questions including Why is it happening? Who benefits? Who is affected? What alternatives are possible?* This process encourages learners not only to evaluate evidence and consider different viewpoints, but also to think creatively and ethically about possible responses. In this way, learning moves beyond the acquisition of knowledge towards the construction of understanding and informed judgement.

Reflection, however, becomes meaningful when it leads to action. Contemporary approaches to sustainability education emphasise that learners should have opportunities to apply their knowledge and values in authentic contexts, strengthening both their confidence and their capacity to contribute to positive change. Whether by reducing waste, reconsidering consumption habits, participating in community initiatives or proposing solutions to local environmental challenges, learners learn that individual and collective actions can contribute to more sustainable futures.

This toolkit has been designed to support this progression from curiosity to critical reflection and from reflection to informed action. Through the use of carefully selected images, everyday objects and active learning experiences, it invites learners to observe closely, ask meaningful questions, engage in dialogue and investigate the stories behind the products they use and consume. These experiences promote critical and systemic thinking while fostering empathy, collaboration, responsibility and a sense of agency. By connecting inquiry with action, the toolkit aims to help learners become thoughtful, informed and engaged citizens who are prepared to make responsible choices in an increasingly complex and interconnected world.



Transformative Teaching and Learning Methods

The world today is facing dire consequences of climate change, waste and pollution. Extreme weather, floods, droughts, and fires, as well as rapidly increasing cases of non-communicative, lifestyle related illnesses, are occurring around the globe. Developing "responsible lifestyles" involves making choices that are based upon up-to-date knowledge of the impacts of one's consumption. It means recognising the roles advertisers, influencers and peer pressure play. Responsible living often consists of daring to make decisions that are not necessarily popular.

Transformative teaching aims to help the learner acquire confidence in their own independent learning processes so that over-consumption and poverty can be reduced not merely by external laws and regulations but also by conscientious attitudes that direct the learners' actions. Such teaching is not prescriptive, yet it does challenge the learner to examine and reorient their habits.

Transformative learning is about the individual learner changing their frames of reference by critically reflecting on their assumption and beliefs, usually facilitated by the occurrence of a disorientating dilemma in which previous frames of reference are no longer adequate to explain the situation being encountered. Reflecting critically on how we perceive the world around us and our relationship with it is an "essential" aspect of sustainability learning. This does not mean, however, that transformative learning transforms the world or even dramatically transforms our own lifestyles. Transformative learning provides learners with a foundation to understand that they have the potential to create big impacts through several coordinated actions towards achieving a more sustainable lifestyle.

Transformative learning approaches offer more opportunities for interaction on a given topic than traditional teaching would. It places learners at the centre of the learning process and holds them responsible for their own learning. This approach also changes the role of the teacher as they become facilitators to the learning processes of the learners, providing more interaction between the educators and the learners.

Transformative learning is supported by a large diversity of learning techniques emphasising critical thinking, real-world experience, and dialogue, challenging assumptions through "disorienting dilemmas," role-playing, simulations, storytelling, and collaborative discourse to foster deep shifts in beliefs, fostering self-directed learning and integrating theory with practice. Key approaches include problem-solving, questioning assumptions, active learning, art-based activities, and situated learning.

Methods to support critical thinking

Critical thinking is one of several types of competencies that education for sustainable development is working with and promoting. Critical thinking skills can be trained and developed with appropriate learning support and can encourage children as young as 5-6 years old to develop sustainability competencies that have similarities to *higher-order thinking skills* (Resnick, 1987).

Critical thinking is defined as the ability to analyse and evaluate information, decide on the validity of facts, and critically assess the relevance of thoughts and suggestions. This is an important capacity in learners' ability to organise and synthesise new learning within existing understandings and knowledge frameworks. Critical thinking is one of the 21st century skills and is defined as part of the 4Cs – collaboration, communication, creativity and critical thinking, which are the basic skills associated with the learning processes of individuals.

Several methods can strengthen learners' abilities to think critically, such as collaborative problem-solving; problem-based learning; and inquiry-based learning. These methods connect the learning material to real-world scenarios and encourage learners to ask questions, collaborate with each other, reflect, challenge assumptions, and practice active listening.

For example, collaborative-problem solving combines the approaches of collaborative learning with problem-based learning. Learning begins with a real-world or wicked problem that doesn't have a clear solution path, and learners need to explore the problem through discussions, share ideas by reasoning and figure out solutions through joint-decision making. Learning is enhanced even further when the problem is analysed from different disciplines through cross-curricular teaching. By applying knowledge from different disciplines, learners take a holistic approach and learn that solving a real-world problem is complex and requires the consideration of different perspectives. It is through such cognitive conflict with other learners in the problem situation that critical thinking is strengthened (Xu, Wang & Wang, 2023).

Inquiry-based learning is another method that encourages critical thinking by bringing real-life experiences to learners through active participation in developing questions to investigate the concepts or topics in more depth or through finding a solution. Such student-led investigations help learners define questions for investigation, identify methods for data collection, analyse and synthesise their findings, and develop their problem-solving skills, critical thinking skills and communication skills (Kalsoom and Khanam, 2017).

Methods that support transformative learning

Central learning goals for learners are to be open to change, to act co-operatively, to think, and to discuss and draw conclusions about different everyday activities in a holistic, critical and creative way for the betterment of all humans.

Education for sustainable lifestyles is best supported by a transformative approach to teaching and learning using learner-centred and constructivist teaching and learning methodologies. The role of the educator is to facilitate learning by providing guidance on appropriate sources, methods and resources, as well as motivating learners to construct their own learning by identifying and evaluating their understanding, values, beliefs and behaviours and taking action accordingly. Learners are then empowered to adopt a more responsible style of living and create a better and more sustainable world.

Skills required for responsible living include:

- critical thinking,
- complex thinking,
- evaluating evidence,
- presenting reasoned argument,
- goal setting,
- seeking alternative solutions,
- adapting to change,
- advocating for change.

The Role of Strategic Questioning

Strategic questioning is a deliberate teaching approach that uses carefully planned questions to stimulate curiosity, encourage learners to think critically about complex issues and deepen their understanding. Rather than asking questions simply to test recall or check comprehension, strategic questioning helps learners investigate ideas, challenge assumptions, consider different perspectives, and reflect on the consequences of their decisions.

In education for sustainable development, there are rarely simple right or wrong answers. Issues such as climate change, personal consumption, waste, biodiversity and sustainable lifestyles involve scientific evidence, ethical considerations, economic realities and social values, as well as being dependent on contextual factors that change between various situations and locations. Learners therefore need opportunities to explore these complexities through discussion, reflection and inquiry.

Strategic questioning supports this process by moving learners beyond memorising facts towards developing the skills needed to analyse information, evaluate evidence, solve problems and take informed action. Rather than telling learners what to think, educators create opportunities for learners to think for themselves.

Well-designed questions help learners to:

- activate prior knowledge and identify misconceptions,
- make connections between ideas,
- analyse information rather than simply recall it,
- evaluate evidence from different sources,
- consider multiple perspectives,
- recognise the complexity of sustainability issues,
- reflect on their own beliefs, values and behaviours,
- identify possible actions they can take.

When learners regularly engage in this type of thinking they become more confident, independent and reflective learners. These are essential competencies for responding to complex global challenges.

Using strategic questioning throughout a lesson
Strategic questioning can be used before, during and after every activity in this toolkit.

Before the activity
Questions help learners connect with the topic and activate prior knowledge. Examples:

- What do you already know about this issue?
- What do you notice?
- Why do you think this happens?
- What questions do you already have?

During the activity
Questions encourage learners to explore ideas in greater depth. Examples:

- What evidence supports your thinking?
- Can you think of another explanation?
- Who might be affected by this?
- What assumptions are we making?
- What connections can you see?
- What information is missing?

After the activity
Questions encourage reflection and action. Examples:

- What surprised you?
- Has your thinking changed?
- What have you learned?
- What could you do differently?
- What further questions do you now have?

From simple questions to deeper thinking
Different questions encourage different levels of thinking.

Purpose	*Example questions*
Observe	What do you notice? What do you see?
Describe	What is happening?
Explain	Why do you think this is happening?
Analyse	What patterns or relationships can you identify?
Evaluate	Which option is most sustainable? Why?
Imagine	What alternatives could there be?
Act	What could we do differently?

This progression helps learners move from observation to reflection and ultimately to informed action. A strategic questioning cycle can be actively applied to move learners through different stages of questioning, such as: Notice → Think → Connect → Challenge → Reflect → Act.



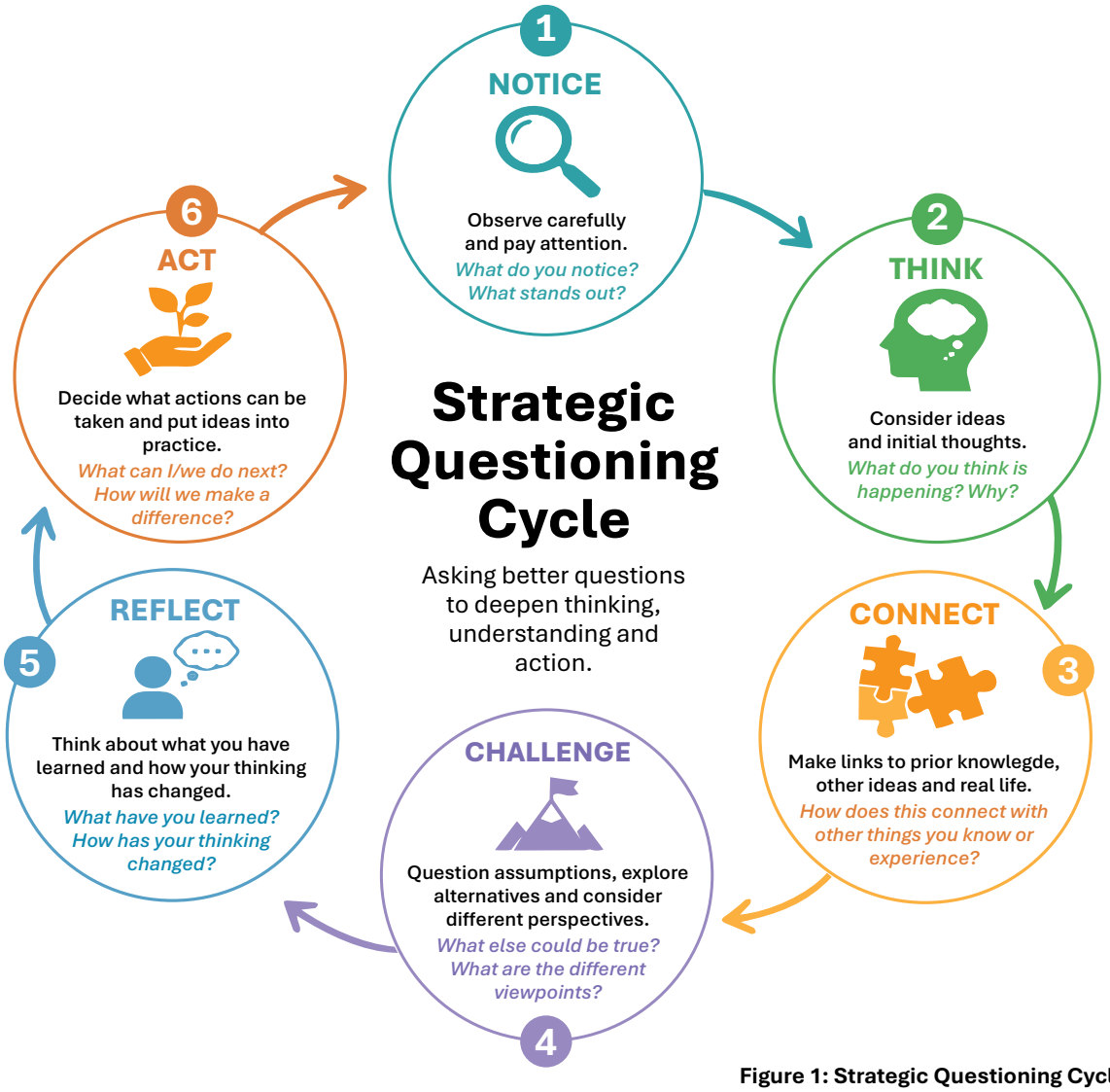


Figure 1: Strategic Questioning Cycle
Illustration: Flisa Trykkeri AS.

Creating a classroom culture of inquiry
Strategic questioning is most effective when learners feel safe to explore ideas without fear of giving the "wrong" answer. Educators can encourage this by:

- allowing sufficient thinking time before expecting responses,
- welcoming different viewpoints,
- asking learners to explain their reasoning,
- encouraging learners to question one another respectfully,
- using follow-up questions rather than immediately providing answers,
- recognising that uncertainty is often part of learning.

The goal is not to reach agreement as quickly as possible, but to deepen understanding through thoughtful dialogue. The most powerful question is not always the one that produces the correct answer. It is often the one that encourages learners to think differently, ask another question, or see an issue from a new perspective. In education for sustainable development, these moments of reflection often become the starting point for meaningful learning and informed action.

How to use this toolkit

Using different methods invites learners to actively engage in the subject matter and allows them to contribute to their own learning. This has many benefits, especially when exploring the wide-ranging concepts related to ESD. This toolkit uses methods such as images, LEGO® and strategic questioning to explore the concepts of personal consumption, climate change, and climate scepticism. Different images appeal to different senses and styles of learning. LEGO® engages learners in hands-on problem-solving and systems thinking. Strategic questioning can support and facilitate this learning and understanding even further. The toolkit also uses scenario thinking to encourage learners to explore the complex challenges of personal consumption and climate change, consider different possible futures, and make informed decisions. Rather than memorizing facts, learners actively engage with real-world problems, making these powerful tools for finding solutions to complex problems. Bringing such alternative methods into the learning environment supports the diverse needs and styles of learners better than traditional methods and helps develop the competencies, knowledge, skills, values, and attitudes needed to contribute to a more sustainable future.

The activities within this toolkit will help learners reflect on their personal consumption and lifestyle and how this affects climate change. The activities will also encourage learners to question the way they think, the values they hold and the decisions they make in the context of personal consumption. The toolkit also specifically addresses climate scepticism by promoting reflective and critical thinking, as well as providing opportunities for the learners to question assumptions and stereotypes and discuss the relationship between causes and effects with others. Thinking critically upon the source of information (social media, newspaper, etc.), appreciating the perspectives of others, reflecting on the outcomes and impact of our actions, and embracing change is required for us to modify our way of living and reflect a responsible approach to everyday life decisions that foster sustainability. The activities can be used as part of separate teaching activities or as part of a Sustainability Week where you collaborate with other subjects.

The toolkit provides short introductions to each activity, with some also providing alternative ways to use the activity. Each activity has its own set of instructions and required materials. The activities are designed in a flexible manner to provide facilitators with the freedom to spend less or more time on individual activities to meet the needs and interests of the learners and the lesson. As a facilitator, you may also choose to adapt and use the suggested activities with different themes. Facilitators are encouraged to use this toolkit in most subject areas and relate to local contexts, making the toolkit both interdisciplinary and transdisciplinary. Where possible, and learners may add additional resources, materials, or images that provide greater connection and relevance to local contexts, challenges, and lifestyles.



Activity 1 – Meet in the Middle

This activity prepares learners to work together to find a deeper understanding of some of the problems represented by selected images. It involves discussion, critical thinking and encourages learners to form their own questions. The facilitator prepares an assignment dealing with personal consumption and global change and learners "meet in the middle" to discuss.

Materials

- Images: each group can receive the same image or different images
- Large sheet of paper for each group
  (learners draw the boxes on the sheet as shown in example on page 18)
- Pens /pencils
- The classroom should be organised for group work
- The teacher selects an image for each group and provides them with a photocopy of the worksheet in A3 or bigger.

Time needed

45-60 minutes

How the Activity Works

Example 1: Gathering Thoughts and Ideas

1. Learners are divided into groups of four.
2. Each group receives an image, photograph, pencils and the worksheet.
3. Each group member identifies which one of the four boxes on the worksheet they will use to record their ideas. (The middle box is left empty for the moment).
4. Each member of the group examines and reflects on the image and any other information provided by the facilitator on the topic.
5. Each member records in their box their ideas and thoughts based on the image and the topic being investigated.
6. Next, group members take turns in sharing and explaining their ideas and thoughts to other members of their group. A discussion takes place.
7. The group then agrees and selects up to four of the ideas they have discussed and records them in the middle box on the worksheet.
8. When this stage has been completed each group presents their ideas to the other groups.
9. Following this, learners evaluate and reflect on the session. The facilitator can pose questions to prompt discussion such as:
   - What did you learn about the topic / theme?
   - Was there anything that surprised you?
   - How did the responses of the different groups compare?
   - Is there anything that you would like to find out more about?
   - What personal lifestyle changes will you consider related to the topic / theme?

Example 2: Forming Questions (suitable for older learners)

1. Learners are divided into groups of four.
2. Each group receives an image, pencils and the worksheet.
3. Each group member identifies which one of the four boxes on the worksheet they will use to record their questions. (The middle box is left empty for the moment).
4. Each member of the group examines and reflects on the image and any other information provided by the facilitator on the topic. They write into their box any questions that they have that have been prompted by the image.
5. Next, all group members take turns sharing their questions with each other. A discussion takes place.
6. The group then agrees and selects up to four of their questions and records them in the middle box on the worksheet.
7. When this stage has been completed each group presents their questions to the other groups.
8. The facilitator invites the learners to discuss how they will find answers to these questions.
9. Learners form a plan of action and agree who will find out what and how and when they will report back their findings to each other.
10. At the end of the activity learners are invited to evaluate and reflect on the session by posing questions such as those in example 1 (step 9).

Example: Forming questions about food

Sample of a completed worksheet for example 2 (forming questions)



How much electricity does an open freezer use each day? How would you know if the food in the freezer is organic?	How can I tell if a product really comes from my country or if it has only been packaged in my country? Is so much packaging necessary? How do I know if the animal feed was genetically modified? How much electricity does an open freezer use each day?	If I buy chicken legs, how can I tell if the producer implemented ethical standards when breeding the chickens? How can I tell if a product really comes from my country or if it has only been packaged in my country?
Is so much packaging necessary? How do I know if the animal feed was genetically modified? How do I know if it is possible to recycle the packaging?		Why is the freezer open? How do I know the origin of the ingredients (e.g. the cheese in the pasta)?

Activity 2 – Visual Carousel

This structured activity is designed to collect learners' responses to an idea, issue or scenario that is represented in an image. Learners' responses to the image are encouraged and stimulated through a range of prepared questions to promote critical thinking such as What? Why? and How? The activity provides the opportunity to review the responses of others, reflect on the learning outcomes of the activity, and examine possible lifestyle changes.

Materials

- Large sheets of paper: e.g. flip chart pages (one page for each group of four learners)
- Glue
- Coloured markers (a different colour for each group of four learners)
- Copies of images (related to the theme you would like learners to explore – one image for each group of four learners)

Time needed

50-75 minutes

Preparation

- Glue each image onto a large sheet of paper
- Prepare a set of questions related to the theme of the image.
  Questions should encourage learners to reflect on challenges, issues etc. related to the theme
- Write a different set of questions on each sheet

How the Activity Works

1. Divide learners into groups of four.
2. Provide each group with a different coloured marker and one of the large, prepared sheets with an image attached and (a) question(s) written on it.
3. Invite each group to take a few minutes to study the image, read the questions, brainstorm possible answers and write some thoughts and responses on their sheet.
4. After the allocated time invite each group to pass their sheet onto a different group. Each group then reads the new questions and the responses from the previous group before adding their own responses. They can also, if they agree with statements already recorded on the sheet, place a ✓ beside the statement. If they disagree with a statement they can place an X beside it.
5. Sheets continue rotating from group to group with each group adding their own ideas and responses using their own-coloured marker so that their contributions can be identified later.
6. When all the sheets have been circulated, review and discuss the responses with the learners. Encourage learners to compare ideas, identify common themes, explore different viewpoints and discuss the wider issues connected to the topic.
7. Invite learners to evaluate and reflect on the session by posing questions such as:
   - What did you learn about the topic or theme?
   - Was there anything that surprised you?
   - How did the responses of the different groups compare?
   - Were there any viewpoints that challenged your thinking?
   - What patterns or common themes emerged across the responses?
   - What other questions could you have been asked to discuss related to the theme?
   - What questions does this activity leave you with?
   - Is there anything that you would like to find out more about?
   - What might have happened before or after the images were taken that is important for sustainability?
   - What personal lifestyle changes will you consider because of this activity?
   - What actions could individuals, schools or communities take to make a positive difference?

On pages 37-39, an example of questions on transportation that you might include on a set of six flip chart pages as part of a Visual Carousel activity are provided. You can use images representing the theme of transportation from the image bank or use your own images.

While the activity is designed around using a different image on each flip chart page, it is also possible to use the same image on each page if a suitable image is available.

Alternative version – Sustainable lifestyles

This offers both a modified version of the Visual Carousel activity and its use with the theme of sustainable lifestyles.

The activity is modified by a different approach to the questioning. In the first example, separate questions are included with each of the different images or themes, and as the image sheets rotate different groups respond to the same questions for each image. In this version, a set of progressive questions are prepared. All groups respond to the same questions in one round, then after changing sheets the groups review the responses from previous groups and then all groups respond to a new set of questions in the next round. This form of questioning encourages learners to go deeper into thinking about and discussing the topics of personal consumption, climate change and sustainable lifestyles.

In thinking about sustainable lifestyles, it is important to encourage learners to think holistically about how lifestyle choices are connected to personal consumption and climate change. This can include many different topics: Where we live? What we wear? How we get around? What we eat? What we do for fun? It can also be valuable to acknowledge that not all forms of consumption are based on material consumption, we also consume time, money, energy, and even relationships.

Materials

- Sheets of large blank paper (size A3 sheets or larger work well)
- Coloured markers (a different colour for each group of four learners)
- Images to represent each of the lifestyle themes you will use – this can be one or multiple images per theme (see pages 41-43)
    - Write the name of each theme down on either the image or on the sheets of blank paper
    - Relevant lifestyle themes include: food, transportation, clothing, housing, supplies/ consumables, personal relationships, energy, electronics, time, money, etc.

Time needed

60-75 minutes – allowing groups to have around 10-15 minutes for each round of questions

How the Activity Works

1. Divide learners into groups of four.
2. Provide each group with a different coloured marker, a sheet of paper, and the image(s) for one of the lifestyle themes.
3. Explain to groups that they will respond to a set of questions in relation to the specific theme they have. After this, they will pass their papers and images to another group, and then they will respond to a new set of questions in relation to a new set of images.
4. Learners can write down responses on the paper in different ways but encouraging them to use a mind map and starting in the middle of the paper can be an especially good way (and then with each group adding on a new layer to the mind map).
5. Provide the first set of questions. These can be read aloud, shown via a projector, or shared on separate pieces of paper.
6. Allow groups 10-15 minutes to discuss and write down their responses. Once most groups have finished, you can move to the next round. You might give a 1- or 2-minute warning to encourage groups to finish up.

7. Have groups pass their sheets and images to another group. This should be done in the same circular pattern each time so that the different themes move to different groups with each round.
8. Before providing the questions for the subsequent rounds, give the groups 2-3 minutes to review what has been previously written down on the sheets. Then provide the next set of questions and instruct the groups to add their responses to the new sheets they received for this round. Continue the same for each of the next rounds.
9. Once the five rounds of questions have been completed, the results can be presented and discussed in plenary. The questions under step 7 of the previous version can be used here.

Questions per Round

Round A

- What is being consumed in this image?
- How does it affect a person's lifestyle?

Round B

- Where do the products come from (and the raw materials in them)?
- How do they come to you as a consumer?
- Who is involved in the production of these products?

Round C

- How does this type of consumption impact on the environment and climate change?

Round D

- What are alternative ways to shop or consume (this product) that can reduce climate change and have a positive benefit for the environment?

Round E

- What aspects of this type of consumption do you see as valuable?
- What aspects of this type of consumption will provide enhanced meaning or quality in your life?

Activity 3 – What's in your wardrobe?

This activity helps learners to reflect on different aspects of their clothing and how this links to sustainability. It involves discussion, complex thinking and explores how decisions related to our clothing can impact global changes.

Materials

- Copy of worksheet: 'Your Wardrobe' for each learner (page 45)
- Copy of 'Themes and Questions on Clothing' (pages 46-47) for each group
- Organise the classroom for group work
- The facilitator prepares images and a set of questions for each theme
- Provide learners with a photocopy of the worksheet for wardrobe review

Time needed

Take home activity and 60-75 minutes in class

How the Activity Works

1. Invite learners to carry out a wardrobe review and guess how many items of clothing they think they have. Ask learners to record their guesses in Step 1 of the worksheet. A space is also available to add in a total for the class group if wished.
2. For the next class, invite learners to check their wardrobe and count how many items of clothing they have and record the numbers in the Step 2 section of the worksheet. A space is also available to add in a total for the class group if wished.
3. Discuss the findings from the survey.
    - Was there much of a difference between the amount of clothing that you thought you had and what you actually have? Were you surprised by this?
    - What about the class totals?
4. Next, divide learners into 5 groups to explore clothing themes such as:
    - Consumer behaviour
    - Reusing/recycling/repairing
    - Value for money
    - Manufacture of clothing
    - Energy

Provide each group with one of the theme titles, an image related to the theme and a set of questions.



5. Instruct the groups to respond to the questions and record their answers and ideas on a flip chart sheet.
6. Invite each group to report their findings to the class.
7. Invite learners to evaluate and reflect on the session by posing questions such as:
    - What did you learn about the topic/theme?
    - Was there anything that surprised you?
    - How did the responses of the different groups compare?
    - Is there anything that you would like to find out more about?
    - What makes clothes sustainable? What is sustainable fashion?
    - What personal lifestyle changes will you consider related to the topic/theme?

Activity 4 – Take a Stand on Global Warming and Climate Change

This activity supports learners' awareness of the human impact on global warming and climate change. It helps learners to understand the interests of different social groups and creates awareness of the complicated issues that are involved in decision-making. It encourages democratic awareness amongst learners and is a suitable activity for older learners.

Materials

- A photocopy of the worksheet (page 48) for each learner
- Paper and pencils for each group to record notes

Time needed

60-90 minutes

Preparation

Divide the class into five groups. Each group takes on a different role that represents a specific social group in society. These include:

- Consumers
- Owners of industrial factories
- Shop owners
- Government
- Environmentalists

How the Activity Works

All members of the groups are provided with a copy of the worksheet. The focus of the work sheet is on global warming and climate change. The goal of each group is to agree on a solution that will contribute to slowing down the warming up of the planet, as carbon dioxide and other emissions from individuals and industries are contributing to global warming.

Each group takes on the role of a specific social group by looking at and representing the interests and priorities of the people that the group represents.

1. Each group works separately and explores the interests and priorities of the social group they represent.
   a) All members of the group read the worksheet and answer the common questions on the worksheet (Section A). This should take approximately 10 minutes.
   b) Then each group discusses the interests of the social group they represent and comes up with answers to the specific questions for their group (Section B). This should take approximately 15-20 minutes.
2. All groups come together for a plenary meeting. Learners select one person to lead the meeting and one person to be a secretary to the meeting. The group leader's role is to chair the meeting so that only one person speaks at a time and everyone gets an opportunity to speak. The secretary's role is to write down the points that are being made during the meeting. This can take from 30-60 minutes.
   a) At the beginning of the meeting each group reports on the interests of their social group.
   b) The group discusses the problem of climate change and tries to come up with a solution to help to slow down global warming, that they can all agree on.

Activity 5 – Responding to Heatwaves

Learners will understand how access to basic resources, such as water and electricity, influences the choices people can make during a heatwave and how these choices affect their health.

Materials

- Scenario Cards (pages 49-50)
- Response Cards (pages 51-52)
- Health Outcome Cards (page 53)
- Optional:
    - Large table or floor space for sorting cards
    - Arrows to connect cards into a decision tree

Time needed

45-60 minutes

Preparation

Learners work in small groups (3 learners). Within each group select roles:

- **Scenario Cards** – selects the scenario cards
- **Decision Maker** – chooses appropriate response cards
- **Health Reporter** – matches the health outcome card and explains the group's decisions

How the Activity Works

1. Each group turns over their Scenario Cards.

Observation: "Different people have access to different resources during a heatwave. These resources affect the actions they can take to stay safe."

2. Groups select only the Response Cards that are possible with their available resources.

Observation: "Some actions require water, electricity or other resources, while others can be used by almost everyone."

3. Groups now examine their selected responses. Based on the number and effectiveness of their responses, they choose one Health Outcome Card.

Observation: "Having more ways to stay cool generally lowers the risk of heat-related illness."

4. Groups present their scenario cards, response cards they selected and their predicted health outcome.

As a class, compare:

- Which groups had the most response options?
- Which groups faced the greatest health risks?
- Which protective actions were possible for everyone?
- Which actions depended on access to water or electricity?
- Which protective actions are available in their community?

Invite learners to discuss and reflect on the activity by posing questions such as:

- Why is drinking water important during a heatwave?
- How does electricity help people stay cool?
- Which protective actions can everyone take?
- Why might some people be more vulnerable during heatwaves?
- How can schools and communities help people during extreme heat?

Key teaching moment: "Heatwaves affect everyone, but people have different resources available to protect themselves. Access to water and electricity increases the number of ways people can stay cool, but simple actions such as staying in the shade, avoiding the hottest part of the day, wearing light clothing and taking regular breaks can also reduce the risk of heat-related illness."

Optional Extensions

Ask groups to arrange their cards into a **decision tree**, showing how different combinations of resources lead to different protective actions and health outcomes.

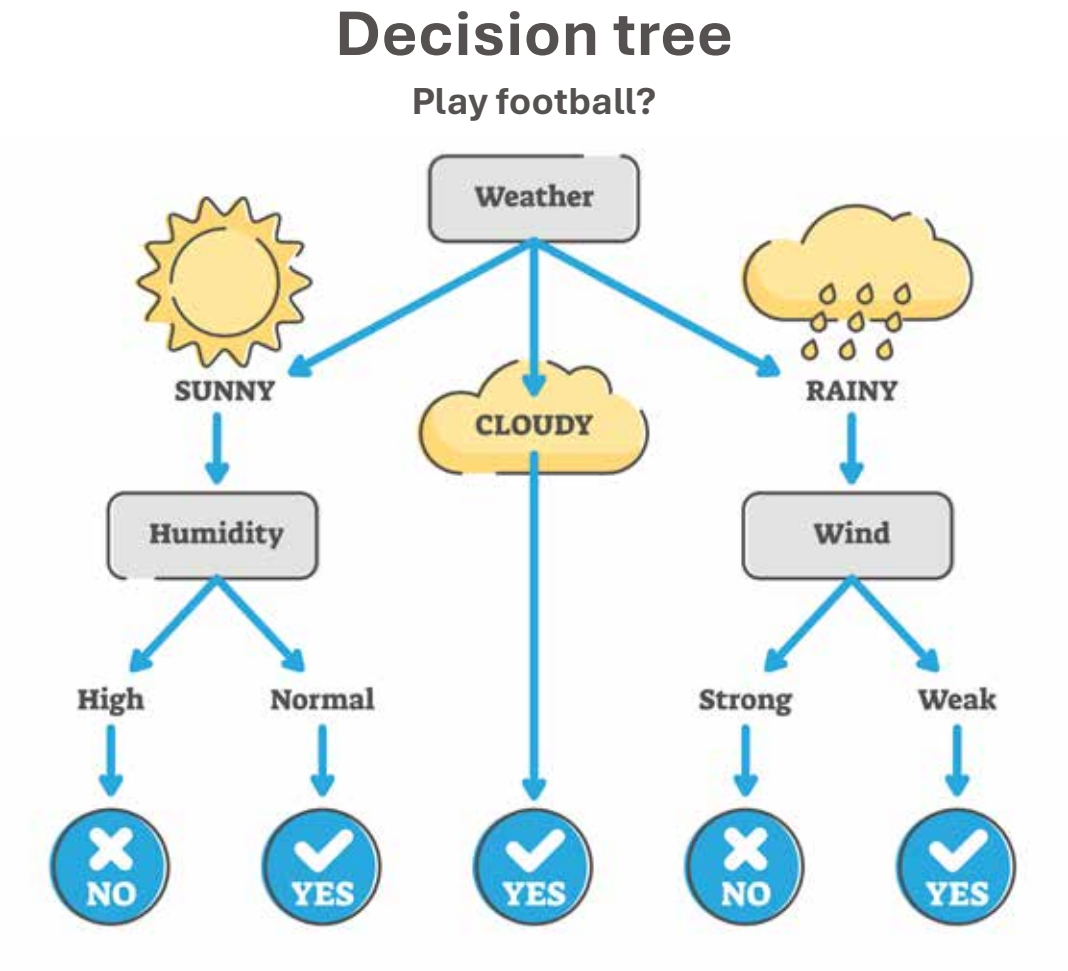


Figure 2: Decision tree
Source: Colourbox

Activity 6 – Take Action: Moving from 7Rs to Circular Economy

Recycling is often promoted as an important way of reducing waste. However, recycling is only one part of a much bigger picture. In a circular economy, we try to keep products and materials in use for as long as possible, prevent waste from being created in the first place, and rethink the way products are designed, made, used and discarded.

In this activity, learners investigate real examples of circular-economy initiatives from Africa and Europe. They use the **7Rs** to analyse what is happening in each case and then explore their own school or local environment to identify opportunities for more circular ways of living.

7Rs: Rethink, Reduce, Reuse, Repair, Renew, Recover, Recycle

Materials

- The nine Circular Economy Case Study cards (page 54)
- Printouts of the 7Rs Analysis Worksheet for each group (page 55)
- Pens/pencils
- Large sheets of paper or poster paper
- Optional: mobile phones/cameras for the local walkabout
- Optional: sticky notes or coloured markers

Time needed

60-90 minutes, *plus additional time if the local walkabout is included.*

Alternatively, the activity can also be completed over two lessons:

- *Lesson 1:* Case studies and the 7Rs
- *Lesson 2:* Local circular-economy investigation and action proposal

Preparation

- Print or display the nine Circular Economy Case Study cards.
- Divide learners into groups of 3-5 learners.
- Introduce the idea that a circular economy aims to prevent waste and keep resources and products useful for as long as possible.
- Introduce the 7Rs model (use the table on the next page).

Note: There have been multiple efforts to expand on the 3Rs – reduce-reuse-recycle – to facilitate a more holistic approach towards the use of material resources and help demonstrate how resource flows may more efficiently operate within a circular economy. The 7Rs is just one model and there are examples where this is expanded to 10Rs in total, and in some variations the first R is "refuse" – to question if the item is needed at all or if it could be done without.

Explaining the 7Rs

Rs	Think about...
Redesign / Rethink	Could the product, service or system be designed or organised differently so that fewer resources are needed and less waste is created?
Reduce	Can we use less material, energy or fewer products in the first place?
Reuse	Can the same product or material be used again rather than thrown away?
Repair	Can a damaged or broken item be fixed so that it remains useful?
Renew	Can something be restored, renewed or replaced using resources that can be replenished?
Recover	Can useful materials, nutrients or energy be recovered from something that would otherwise become waste?
Recycle	Can discarded material be processed into material that can be used again?

Note for facilitators: Some examples may fit more than one of the 7Rs. There is not always one correct answer. Encourage learners to explain their reasoning.

How the Activity Works

Part 1 – Circular Economy Around the World

1. Divide learners into groups and give each group one or more of the Case Study cards.
2. Ask learners to read their case and discuss the following questions:
    - What problem is this initiative trying to address?
    - What happens differently from the usual way of doing things?
    - What happens to the product or material that might otherwise have become waste?
    - Who is involved?
    - Which of the 7Rs can you identify?
    - Is one R more important than the others in this case?
    - Does the initiative prevent waste, or does it deal with waste after it has already been created?
    - What questions would you like to ask the people involved?

Part 2 – Which R?

3. After examining the cases, ask each group to complete the 7Rs Analysis Worksheet.
4. A case can be placed under **more than one R**, but learners must give a reason for their choice.
5. Discuss – Once groups have completed the worksheet, compare answers and have them discuss.

Discussion questions:

- Did different groups classify the same case differently?
- Can more than one R happen at the same time?
- Which cases try to stop waste being created?
- Which cases make use of something after it has already become waste?
- Which examples keep the original product in use for longer?
- Which examples turn a material into something different?
- Which examples require people to change their behaviour?
- Which examples change the system around people, making a more sustainable choice easier?
- Which approaches do you think are likely to have the greatest impact? Why?

6. Think critically about – plenary discussion: Ask the question "Is recycling always the best option?"
7. Ask learners to consider a broken mobile phone and to compare various options. Which option keeps the greatest amount of the original product and its materials in useful circulation?
    - throwing it away;
    - recycling its materials;
    - repairing it;
    - replacing one broken component;
    - redesigning the phone so that components can easily be replaced.

Part 3 – Circular Economy Walkabout

Now the learners investigate their own environment. This can take place within the school grounds, around a university or community centre, in a shopping area, or during a short, supervised walk through the local neighbourhood.

8. Working in small groups, learners should look for examples of both circular and linear ways of using resources.
9. Groups should record or photograph at least three examples of different types of resource use (alternatively, they can be asked to identify 2 linear and 2 circular examples of resource use).
10. For each identified example, groups should explain:
    - What is happening now?
    - Which of the 7Rs, if any, can you already see?
    - What resources are being lost or wasted?
    - Could another R be used instead?
    - What would have to change?
    - Who would need to be involved?

Examples groups might identify during their Circular Economy Walkabout

- things being repaired;
- second-hand goods;
- refillable containers;
- reusable packaging;
- discarded food;
- disposable cups or takeaway containers;
- broken furniture;
- recycling facilities;
- repair shops;
- clothing shops;
- second-hand clothing shops;
- electronic equipment;
- water refill stations;
- composting;
- food markets;
- products with unnecessary packaging;
- objects that could have been reused but have been thrown away.

Part 4 – Take Action

11. Each group chooses one opportunity that they identified during the walkabout for which they will develop a simple proposal showing how the situation could become more circular.
12. Groups respond to the following questions:
    - What is the problem?
    - Which R or Rs could help?
    - What do you propose to change?
    - Who would need to help make the change?
    - What resources would be needed?
    - What might make the change difficult?
    - How would you know whether your idea worked?
13. Groups make a presentation of their proposal in one of the following formats (either preselected by the teacher or decided by the groups freely):
    - a poster; a short oral presentation; a photograph with annotations; a short video; a drawing or diagram showing "Now → Change → Circular Future"; or a letter/proposal to someone who could help make the change.
14. Final Reflection - Invite learners to discuss:
    - What did you previously think recycling meant in relation to sustainability?
    - Has your thinking changed?
    - Which of the 7Rs seems most powerful to you? Why?
    - Which R was easiest to find in your local environment?
    - Which was hardest to find?
    - What makes some circular choices easier than others?
    - What could individuals change?
    - What needs to change at the level of businesses, schools, communities or governments?
    - What is one change that could realistically be made in your own environment?

Key teaching idea:

A circular economy is not only about finding better ways to deal with waste. It is also ***about rethinking systems so that less waste is created and products and materials remain useful for longer.***

Activity 7 – Alien with a Sustainability Superpower

This activity encourages learners to explore the elements of a sustainable lifestyle through imagination, creativity and discussion. Using a small selection of bricks e.g. LEGO®, different learners build an alien and give it one sustainability superpower that will help it live responsibly on Earth. Through storytelling, strategic questioning and reflection, learners consider the knowledge, values, behaviours and actions that contribute to sustainable living while recognising that everyone can play a part in creating a more sustainable future.

Materials

- A selection of bricks and elements (different shapes and colours) to choose from
- A flat working surface such as a desk or table

Time needed

45-60 minutes

How the activity works

1. Provide each learner with a selection of bricks.
   Invite learners to spend a few minutes exploring the bricks by connecting them into any shape they wish. The purpose of this short warm-up is simply to have fun, help learners become familiar with the bricks, learn how the bricks connect and developing confidence.

2. Introduce the building challenge by saying:

   "An alien has just arrived on Earth. It wants to help protect our planet but knows very little about how people live sustainably. Build an alien that has one sustainability superpower that will help it live responsibly on Earth. Give your alien a name."

   or

   "An alien has just arrived on Earth. It needs to eat, travel, buy things, use energy and dispose of waste, but it wants to do this in ways that protect people and the planet. Build an alien that has one sustainability superpower that will help it live responsibly on Earth."

   Explain that the superpower can represent a skill, behaviour, value or action. Encourage learners to use the bricks creatively and remind them that there are no right or wrong answers.

3. Invite learners to share their models in small groups.
   Each learner explains their alien and its sustainability superpower while the others listen. They can then ask questions.

   Examples of strategic questions or question prompts include:
   - Tell us about your alien.
   - What is your alien's sustainability superpower?
   - Why did you choose this superpower?
   - How will it help the alien live sustainably?
   - What challenge might your alien still face?
   - If your alien could develop another sustainability superpower, what would it be?

4. Bring the class together once everyone has shared and invite learners to compare their ideas.

   Use questions such as:
   - Which sustainability superpowers appeared more than once in your group?
   - Which ideas surprised you?
   - Which superpower do you think would have the greatest positive impact?
   - Which superpower would be most useful for people living on Earth?
   - What can we learn from these aliens about living more sustainably?
   - If everyone had one of these sustainability superpowers, how might our communities change?

   Encourage learners to recognise that sustainable living is made up of many different actions and that everyone can contribute in different ways.

5. Conclude the activity by inviting learners to reflect individually or in pairs.
   Suggested questions include:
   - What did you learn from this activity?
   - Which alien's sustainability superpower impressed you most? Why?
   - Did any of the ideas change your thinking?
   - If you could borrow one sustainability superpower, which would you choose?
   - What is one action you could take that is similar to your alien's superpower?

Example of what an Alian can look like.



Photo: Miriam O'Donoghue

Activity 8 – Case study: Before and After

This is a two-part activity where learners first engage with the case of the Planetary Health Diet, prepared by the EAT-Lancet Commission, before exploring how they could incorporate new practices into their daily diet. The activity follows an inquiry-based learning cycle to engage, explore, explain, elaborate and evaluate the plant-forward diet. Inquiry-based learning activates prior knowledge, encourages active investigations and develops critical reflection. Through practical exploration and evaluation, it deepens understanding and skills.

The **EAT-Lancet Commission** is a global scientific collaboration established by the EAT Foundation and The Lancet to address the challenge of feeding a growing world population while safeguarding both human health and environmental sustainability. Their landmark report from 2019 was the **Planetary Health Diet PHD 1.0**, a predominantly plant-based reference diet designed to support human health while remaining within planetary boundaries. In 2025, the Commission released an updated framework, often referred to as **PHD 2.0**, which retained the core dietary principles but expanded the focus to include affordability, social justice, cultural diversity, equity, and resilience in food systems.

Materials

- Copies of Images (sample images on page 57)
- The EAT-Lancet Commission video "Healthy, Sustainable, and Just Food Systems" (2025): https://youtu.be/qVaDbTZK7u0?si=1M8he_g1nvogM86T.
    - Alternatively, they can read the article, "A Blueprint for Survival: New EAT-Lancet Report Is a Sustainable Food Systems Roadmap" (2025): https://news.climate.columbia.edu/2025/10/03/a-blueprint-for-survival-new-eat-lancet-report-is-a-sustainable-food-systems-roadmap/
- Copies of Worksheet 1 – Identifying Arguments (page 59)
- Copies of Worksheet 2 – Tips for Adopting Planetary Health Diet (page 60)
- Copies of Worksheet 3 – Taste Testing (page 61)
- Access to the school kitchen or food lab
- Ingredients to make snacks based on the Planetary Health Diet

Time needed

Part 1 Investigate and Reflect: 90 minutes
Part 2 Taste-testing: 60 minutes for producing the food and 60 minutes for taste-testing

How the Activity Works

Part 1 – Investigate and Reflect

1. Learners look at images related to current food systems and reflect on how they are related to climate change. Examples of questions
   - When thinking of climate change, what are your first thoughts when you see these images?
   - What do you already know about this issue?
   - How do these images relate to your own personal consumption?

   Share responses in a plenary session.
2. The class views the EAT-Lancet video on healthy, sustainable, and just food systems.
3. Learners are divided into small groups of 4-5 and each group is provided Worksheet 1.
4. Learners share their responses and discuss within their groups. Prompts for discussion could be:
   - Why do you agree with this argument the most?
   - What has convinced you? What helps you to accept that an argument is justified and accurate?
   - Which of the Planetary Health Diet arguments do you feel most comfortable with and would be willing to apply in your life?
5. Each group highlights the most important outputs from their group discussion in a plenary session.
6. The class now envisages they have been invited to a Wellness Youth Festival. Again, in their small groups, they use Worksheet 2 to brainstorm, select and list key tips they would give teenagers like themselves on how to switch from a more meat-based to a more planetary health diet to present at the Wellness Youth Festival. They also need to include examples of snacks and simple dishes.
7. Through a class vote, learners choose which top three snacks they will produce in the next part of this activity.

Potential optional activity: The tips and examples sections of Worksheet 2 can be designed as a Plant-forward Diet Tips leaflet which could be given out at the Youth Festival (or other places where young people buy snacks).

Part 2 – Taste-testing Activity

1. Learners write out the recipes for the three top-voted snacks they will prepare.
2. Learners are divided into groups of 4-5 learners, with each group tasked to produce 15-20 small samples of the snack assigned to them.
3. Each group prepares their snack and plates the samples. Photos are taken of each item.
4. Learners are provided Worksheet 3 and invited to taste all the produced snacks. They use their worksheet to rate their snacks. Tip: water is a great cleanser between each taste-test.
5. Learners analyse the completed worksheets and the overall scores on each snack they prepared, noting low scores or other written feedback.
6. The working groups discuss and suggest changes to their snacks to improve the taste and acceptance by teenagers. They can also name each recipe.
7. The best recipes can be shared in leaflet format with the whole school community.

Potential optional activity: For outreach into the local community, learners could be encouraged to contact the school cafeteria and/or local cafes to share their leaflet with examples of learner-approved healthy planet diet recipes to add to their menus.

Reflection, Assessment and Extension

The activities in this toolkit are designed to encourage learners to explore issues, ask questions, collaborate with others and develop informed responses to the challenges of personal consumption and climate change. Reflection provides an opportunity for learners to consolidate their learning, recognise changes in their thinking and identify opportunities for future action. Assessment should focus not only on what learners know, but also on how they think, communicate, collaborate and apply their learning in meaningful contexts.

Reflection

The following questions can be adapted for use after any activity in this toolkit.

What?

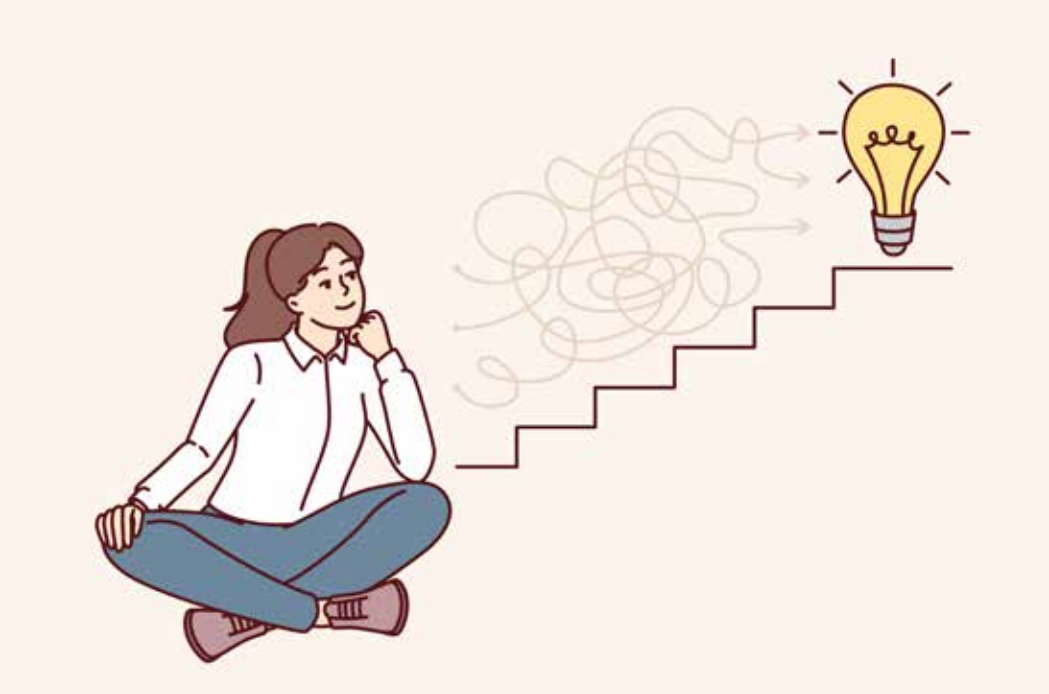
- What did you notice?
- What did you learn?
- What surprised you?
- What did you find most interesting?
- What questions do you still have?

So What?

- Why is this important?
- How does this connect to climate change?
- How does this relate to my own life?
- How has my thinking changed?
- Why should other people care about this issue?

Now What?

- What could I do differently?
- What action could I take?
- What could we do as a class or school?
- What would I like to investigate further?
- What is one change I could realistically make?



Assessment

The activities in this toolkit are intended to support formative assessment. Rather than focusing solely on factual knowledge, educators are encouraged to observe how learners investigate ideas, use evidence, communicate their thinking, collaborate with others and reflect on their learning.

Evidence of learning might include:

- participation in discussions
- quality of questioning
- reasoning and justification of ideas
- collaborative problem solving
- presentations or displays
- reflective journals
- concept maps
- action plans
- peer assessment
- self-assessment
- exit tickets.

Extension

Many of the themes explored in this toolkit can be investigated further through inquiry and real-world action. Extension activities provide opportunities for learners to deepen their understanding and apply their learning beyond the classroom.

Learners might:

- investigate a sustainability issue within their local community
- interview family or community members about changing consumption habits
- carry out a classroom, home or school waste audit
- keep a personal consumption diary for one week
- research the life cycle of an everyday product
- compare the environmental impact of different consumer choices
- photograph examples of sustainable and unsustainable practices in their community
- design a campaign to encourage more sustainable lifestyles
- invite a local expert or organisation to speak to the class
- create posters, podcasts or short videos to communicate key messages
- organise a clothes swap, repair café or recycling initiative
- investigate how their school could reduce waste, save energy or encourage more sustainable transport.

Encourage learners to revisit their ideas over time. Ask them:

- Has your thinking changed?
- What have you learned since completing the activity?
- Have you taken any action?
- What impact has that action had?
- What would you do next?

Information Resources *(to use with learners)*

If you would like to encourage learners to explore relevant information and evidence on the relationship between climate change and personal consumption, you might want to utilise one of these resources:

Evidence on impacts of different lifestyle change options: Hot or Cool (2021). 1.5-Degree Lifestyles: Towards A Fair Consumption Space for All. https://hotorcool.org/publications/1-5-degree-lifestyles-towards-a-fair-consumption-space-for-all/

Dimensions of sustainable lifestyles and driving factors: United Nations Environment Programme (2016). A Framework for Shaping Sustainable Lifestyles: Determinants and Strategies. https://www.unep.org/resources/publication/framework-shaping-sustainable-lifestyles-determinants-and-strategies

Understanding the Planetary Health Diet: The EAT-Lancet Commission on Healthy Sustainable and Just food systems (2025). 2025 EAT-Lancet Summary Report. https://eatforum.org/eat-lancet/summary-report/

References

Kalsoom, Q., & Khanam, A. (2017). Inquiry into sustainability issues by preservice teachers: A pedagogy to enhance sustainability consciousness. Journal of Cleaner Production, 164, 1301-1311. https://doi.org/10.1016/j.jclepro.2017.07.047

Intergovernmental Panel on Climate Change. (2018). Global warming of 1.5°C: An IPCC special report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty. Cambridge University Press. https://doi.org/10.1017/9781009157940

Intergovernmental Panel on Climate Change (IPCC). (2021). Climate Change 2021: The Physical Science Basis. Cambridge University Press. https://www.ipcc.ch/report/ar6/wg1/

Intergovernmental Panel on Climate Change (IPCC). (2022). Climate Change 2022: Mitigation of Climate Change. Contribution of Working Group III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change. Cambridge University Press. https://www.ipcc.ch/report/ar6/wg3/

Intergovernmental Panel on Climate Change (IPCC). (2023). Climate Change 2023: Synthesis Report. IPCC. https://www.ipcc.ch/report/ar6/syr/

International Energy Agency (IEA). (2023). Energy Efficiency 2023. International Energy Agency. https://www.iea.org

NASA. (2024). Evidence for climate change. NASA Science. https://science.nasa.gov/climate-change/evidence/

NASA. (2024). The effects of climate change. NASA Science. https://science.nasa.gov/climate-change/effects/

Poore, J., & Nemecek, T. (2018). Reducing food's environmental impacts through producers and consumers. Science, 360(6392), 987–992. https://doi.org/10.1126/science.aaq0216

Resnick, L. B. (1987). Education and learning to think. Washington, DC: National Academies Press. https://doi.org/10.17226/1032

United Nations Environment Programme (UNEP). (2023). Sustainable Consumption and Production. https://www.unep.org

UNESCO. (2020). Education for Sustainable Development: A Roadmap. UNESCO Publishing. https://unesdoc.unesco.org

Xu, E., Wang, W. & Wang, Q (2023). The effectiveness of collaborative problem solving in promoting students' critical thinking: A meta-analysis based on empirical literature. Humanit Soc Sci Commun 10, 16. https://doi.org/10.1057/s41599-023-01508-1

Activity 2 - Visual Carousel: Sample Questions about Transport



Page 1:

What modes of transport are shown in this image?

What other forms of transport are available?

Which forms of transport do you think are the most sustainable?



Page 2:

What types of energy does the transportation shown in this image use?

What other types of energy are being used for transportation?

Which types of energy deplete our natural resources?



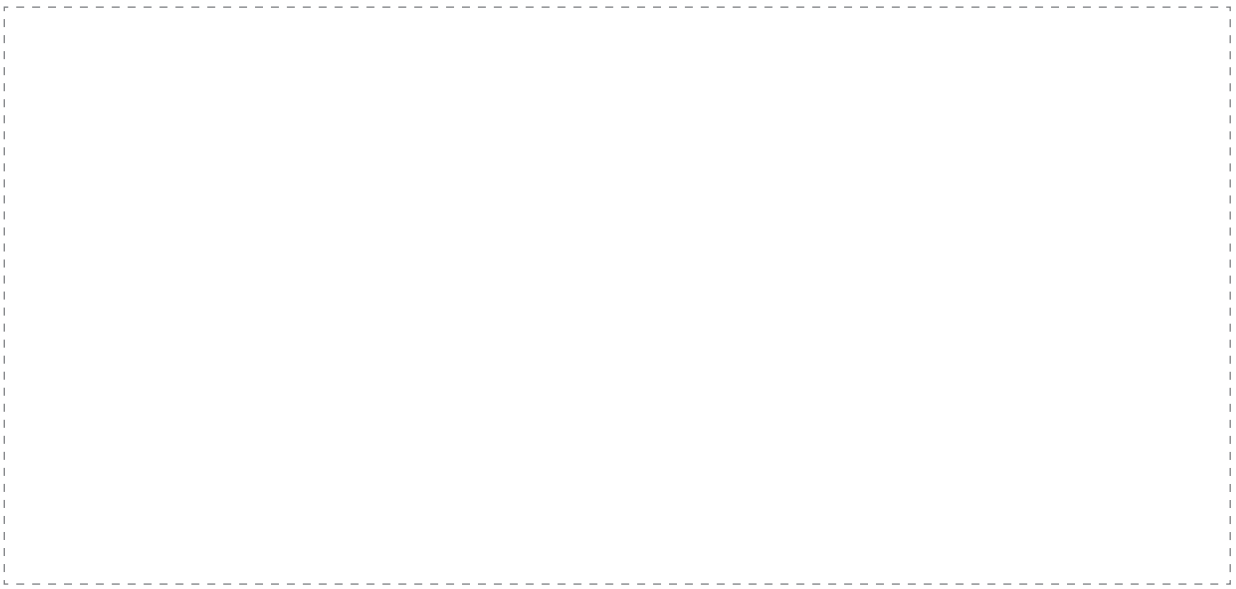
Page 3:

What types of pollution are caused by transportation?

Which types of transportation cause less air and water pollution?







Activity 2 - Visual Carousel: Sample Questions about Transport



Page 4:

What infrastructure do you see that might encourage people to travel in a more sustainable way?

What other types of infrastructure encourage sustainable travel?



Page 2:

What type of goods do you think these cargo ships are transporting?

Where do you think the goods might have travelled from?

What factors should you consider when purchasing imported goods?



Page 6:

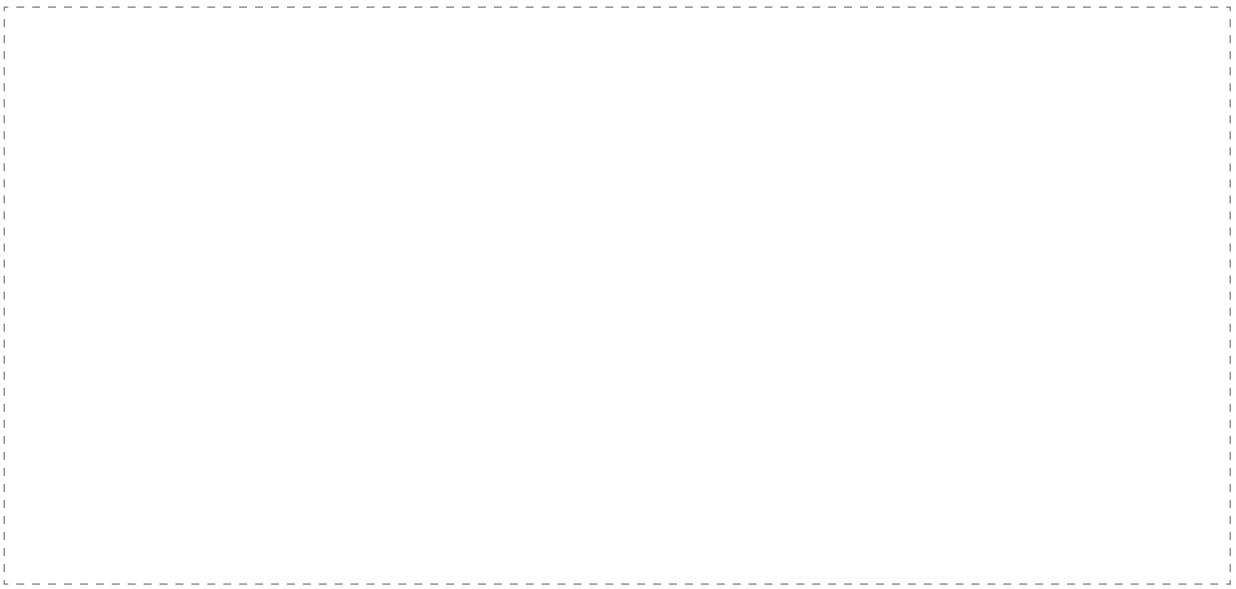
Why do many people live a car intensive lifestyle?

What is the impact of this lifestyle?

What can you/others do about this lifestyle?







Activity 2 - Visual Carousel: Pictures for Sustainable Lifestyles

Clothing







Energy







Food

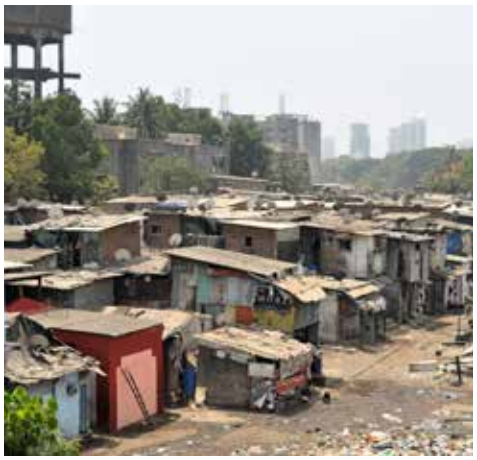






Housing





Activity 2 - Visual Carousel: Pictures for Sustainable Lifestyles

Personal Relationships





Transportation







Supplies & Consumables







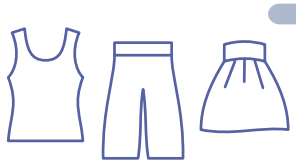
Leisure time







Activity 3 – What's in your Wardrobe worksheet



YOUR WARDROBE



STEP 1 Guess how many items of clothing you have in your warderobe.			**STEP 2** Check your warderobe and count how many items of clothing you actually have.		
Type of clothing	**Your estimate**	**Total class estimate**	**Type of clothing**	**Your number**	**Total class estimate**
Tops (sweater/ T-shirt/blouse)					
Dresses					
Skirt / trousers					
Coat / jacket					
Shoes / boots					
Underwear					
Socks / tights					
Other					
Totals					

Activity 3 – Themes and Questions on Clothing

1) Consumer Behaviour

- How many clothes do you usually use per week?
- How many of your clothes have you not used in the last six months?
- Do you need all of the clothes that you have in your wardrobe. Why?
- What could you do with clothes you don't need?
- How long is a new sweater new to you?
- Is it true that clothes say a lot about a person?
- Were you surprised by how many clothes you own? Why?
- Why do people often buy more clothes than they need?
- What influences the clothes people choose to buy?

2) Reusing/Recycling/Repairing

- Where can you find a second-hand store or market in your area?
- Would you repair your favourite sweater if it got torn? Why? / Why not?
- How can we make clothes we like last for a long time?
- Do you repair your shoes or boots when the heels become worn? Why? / Why not?
- What are the advantages of repairing clothes rather than replacing them?
- Why do some people choose not to repair clothing?
- What could encourage more people to repair, swap or reuse clothes?

3) Value for Money

- You buy a red shirt for 15 Euros and you don't think it's too expensive, but then in one year you notice it in the bottom drawer and you remember you have only used it twice. Has it been an expensive buy or not? Why?
- What about your favourite clothes? Were they expensive compared to the amount of use that you got from them?
- Which represents better value: an inexpensive item worn twice or an expensive item worn many times? Why?
- What does "good value for money" really mean?
- How does buying fewer, better quality clothes affect sustainability?
- What factors influence our buying decisions besides price?

4) Manufacture of Clothing

- Does it matter what fabrics yours clothes are made of? Why?
- Do you mind if your clothes are made out of polyester? Why?
- Do you look at labels when you buy clothes? What information do you look for?
- Does it matter where the clothes were made and by whom? Why?
- What journey does a T-shirt take before it reaches your wardrobe?
- Why does it matter where and how clothes are made?
- Who is involved in making our clothes?
- What environmental impacts are associated with clothing production?
- What information on clothing labels can help us make more sustainable choices?
- Should consumers have more information about how clothes are produced? Why?

5) Energy

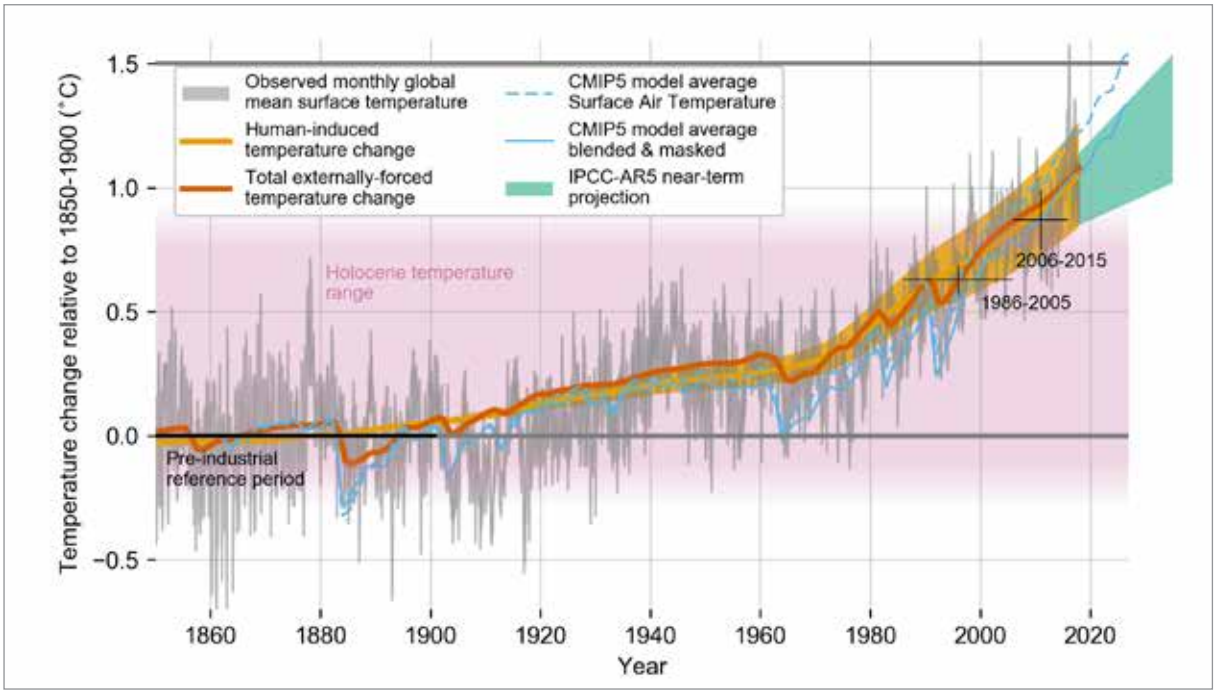
- What is the cost of electricity to wash one load of clothes in the washing machine?
- What is the cost of electricity to dry one load of clothes in the dryer?
- Why is it forbidden in some communities to put clothes on a line to dry?
- What are the advantages and disadvantages of putting clothes to dry on a clothesline outdoors?
- Which uses more energy, washing or drying clothes?
- How could we reduce the energy used when caring for clothes?
- Why do some people choose to use a tumble dryer even when a clothesline is available?
- What small changes could reduce the environmental impact of washing clothes?

6) Whole-class discussion

- Which idea challenged your thinking the most? Why?
- Which topic generated the most discussion? Why?
- Were there any different opinions within your group? What did you learn from them?
- What connections can you see between the five themes explored?
- If you could change one thing about the way people buy, use or dispose of clothes, what would it be?
- What is one action you could take after today's lesson?

Activity 4 - Take a Stand Worksheet

Figure 1.2 from the IPCC's Global Warming of 1.5°C special report (2018), titled "Evolution of global mean surface temperature (GMST) over the period of instrumental observations."



A. Common questions for all groups:

- What information does the graph give us?
- Why has the global mean surface temperature increased?
- Do we need to worry about his development? Why? Why not?

B. Selective questions for each group:

1. Consumers:

- ➤ As consumers, does your consumption affect global warming and climate change? How?
- ➤ What could you do as consumers to help slow down global warming?
- ➤ How will acting responsibly in relation to global warming impact on your lifestyle?

2. Owners of Industrial Factories:

- ➤ As owners of industrial factories, do your production methods have any impact on global warming and climate change? How?
- ➤ What could you do as owners of industrial factories to help slow down global warming?
- ➤ How will acting responsibly in relation to global warming affect your industry?

3. Shop Owners:

- As shop owners, is your selection of goods contributing to global warming and climate change in any way? How?
- How can you change your selection of goods to help slow down global warming?
- What impact will this change have on your business?

4. Government:

- What are your interests as members of government in global warming and climate change?
- Why is your role in government in relation to global warming and climate change important?
- How could government act more responsively in relation to global warming?

5. Environmentalists:

- What are your interests as environmentalists in global warming and climate change?
- As environmentalists, why is your role in relation to global warming important?
- How could you respond to global warming?

Activity 5 – Responding to heatwaves

Scenario Cards: Responding to a Heatwave

Print and cut out these cards. Give one card to each group before they begin the activity.

Scenario Card 1 – Student Walking Home

Situation
You are walking home from school during a heatwave. It is 1:00 p.m. and the temperature is 38°C. The walk home takes 30 minutes.

Available Resources
- Drinking water
- No electricity until you get home

Challenge
Choose the best actions to stay safe on your journey home.

Scenario Card 2 – Family Power Outage

Situation
Your neighbourhood has lost electricity during a heatwave. The temperature inside your home is rising.

Available Resources
- Drinking water and water for cool showers
- No electricity

Challenge
Choose the best ways to keep everyone cool until the power returns.

Scenario Card 3 – Water Restrictions

Situation
A drought has caused water restrictions. Your family has electricity, but you must save water.

Available Resources
- Limited drinking water and no water for cool showers
- Electricity

Challenge
Decide which cooling actions are still possible and which are no longer available.

Scenario Card 4 – Outdoor Sports Day

Situation
Your school is holding a sports day during a heatwave. The activities are planned for the afternoon.

Available Resources
- Drinking water
- Electricity inside the school building

Challenge
Choose the best actions to reduce the risk of heat-related illness before, during and after the activities.

Scenario Card 5 – Elderly Neighbour Living Alone

Situation
Your elderly neighbour lives alone during a heatwave. They have electricity but find it difficult to leave the house.

Available Resources
- Drinking water
- Electricity

Challenge
Choose the most important actions that could help them stay safe and identify any additional community support they might need and which are no longer available.

Scenario Card 6 – Camping During a Heatwave

Situation
Your family is camping during a heatwave. There is no electricity at your campsite.

Available Resources
- Drinking water
- No electricity

Challenge
Choose the best ways to stay cool throughout the day and decide which activities should be avoided.

Scenario Cards: Responding to a Heatwave

Print and cut out these cards. Give one card to each group before they begin the activity.

Scenario Card 7
– Rural Village During a Heatwave

Situation
You live in a rural village in a developing country. During the heatwave, there is no electricity and water is only available from a community well. The nearest health clinic is several kilometres away.

Available Resources
- Limited drinking water
- No electricity

Challenge
Choose the best actions to stay safe with the limited resources available.

Scenario Card 8
– Looking After a Young Child

Situation
Your family is caring for a 2-year-old child during a heatwave. Young children become dehydrated more quickly than adults and rely on adults to keep them safe.

Available Resources
- Drinking water
- Electricity

Challenge
Choose the best actions to protect the young child from the heat and identify any additional support they might need.

Scenario Card 9
– Living with a Chronic Health Condition

Situation
A family member has a chronic health condition (such as asthma, heart disease or diabetes). During a heatwave, they become tired more quickly and are at greater risk of heat-related illness.

Available Resources
- Drinking water
- Electricity

Challenge
Choose the best actions to help this person stay safe during the heatwave and identify any additional community support they might need.

Activity 5 – Responding to heatwaves

Response Cards

Print one copy of each card and place them face up in the centre of the table.

Drink Water Frequently
Resource Needed: Water
Why?
Replaces fluids lost through sweating and helps prevent dehydration.

Wear Light-Coloured, Loose Clothing
Resource Needed: None
Why?
Allows heat to escape and helps your body stay cool.

Take a Cool Shower
Resource Needed: Water
Why?
Lowers body temperature and helps cool the skin.

Take Regular Cooling Breaks
Resource Needed: None
Why?
Resting in a cool place prevents your body from overheating.

Wet a Towel or Cloth
Resource Needed: Water
Why?
Place it on your neck, wrists or forehead to cool your body.

Plan Activities for Early Morning or Evening
Resource Needed: None
Why?
Temperatures are usually cooler than in the afternoon.

Stay in the Shade
Resource Needed: None
Why?
Keeps you out of direct sunlight and helps reduce body temperature.

Avoid Outdoor Activity at Midday
Resource Needed: None
Why?
Reduces exposure to the hottest temperatures and strongest sunlight.

Open Windows at Night
Resource Needed: None
Why?
Helps your home stay cooler.

Use Air Conditioning
Resource Needed: Electricity
Why?
Lowers indoor temperature during the hottest part of the day.

Close Curtains or Blinds During the Day
Resource Needed: None
Why?
Keeps sunlight out and helps your home stay cooler.

Use a Fan
Resource Needed: Electricity
Why?
Increases air movement and helps you feel cooler.

Response Cards

Print one copy of each card and place them face up in the centre of the table.

Visit a Public Cooling Centre
Resource Needed: Community Support
Why?
Provides a safe, cool place (e.g. library, shopping mall, school...) during extreme heat.

Check on Family, Neighbours or Friends
Resource Needed: None
Why?
Older adults, young children and people with health conditions may need extra help during a heatwave.

Well-Insulated Home
Resource Needed: Good-quality housing
Why?
A well-insulated home slows down the transfer of heat from outside, helping to keep the inside cooler during hot weather.

Drinking Water Stations
Resource Needed: Community support
Why?
Free drinking water stations help people stay hydrated, especially if they do not have easy access to clean drinking water.

Tree Shade in Parks
Resource Needed: Community support
Why?
Trees provide natural shade and cool the surrounding air, making outdoor spaces safer during hot weather.

Heatwave Warning Messages
Resource Needed: Community support
Why?
Warnings inform people when dangerous heat is expected so they can prepare in advance.

Free Fans for Vulnerable Households
Resource Needed: Community support
Why?
Fans help improve air circulation and provide cooling for people who cannot afford one.

Activity 5 – Responding to heatwaves

Health Outcome Cards

Print these cards and place them in a separate pile. After selecting their Response Cards, each group chooses the Health Outcome Card that best matches their heatwave responses.

Low Health Risk

Protection Level: Excellent Heatwave Protection

What does this mean?
You chose many effective ways to stay cool and hydrated.

Possible Health Outcomes

- Comfortable body temperature
- Good hydration
- Normal concentration and energy
- Able to carry out daily activities safely
- Low risk of heat exhaustion or heat stroke

Moderate Health Risk

Protection Level: Some Heatwave Protection

What does this mean?
You chose some helpful responses, but there are still risks from the heat.

Possible Health Outcomes

- Mild dehydration
- Feeling tired or weak
- Headache
- Difficulty concentrating
- Reduced physical performance
- Increased chance of heat exhaustion if the heat continues

High Health Risk

Protection Level: Limited Heatwave Protection

What does this mean?
Few effective cooling options were available, increasing the risk of heat-related illness.

Possible Health Outcomes

- Severe dehydration
- Heat exhaustion
- Heat stroke (medical emergency)
- Dizziness or fainting
- Worsening of asthma, heart disease or other health conditions
- Hospitalisation may be needed in severe cases

Activity 6 – Circular Economy Case Studies

SOUTH AFRICA Western Cape Industrial Symbiosis Programme (WISP) Companies in the Western Cape are connected with other companies that can use resources they no longer need. Materials that might have become waste – including timber, textiles and other industrial materials – can instead become resources for another business.	**KENYA FoodFlow** FoodFlow works with fruit and vegetable supply chains in Kenya. It develops local enterprises that use surplus or lower-grade mangoes, avocados and French beans that might otherwise be lost, including processing them into products that last longer.	**NIGERIA Planet 3R** Planet 3R turns discarded textile and plastic materials into new useful products. Plastic and textile waste is woven and transformed into items such as bags, fashion products and household goods.
ETHIOPIA soleRebels soleRebels makes footwear using locally available and lower-impact materials. Its shoes have included soles made from recycled vehicle tyres as well as locally produced plant fibres and organic cotton. Traditional Ethiopian footwear ideas are combined with contemporary design.	**UNITED KINGDOM Down to Earth Community Café, Wantage** Down to Earth is a community and training café that cooks with as much surplus food as possible. Food that is still good to eat but might otherwise become waste is transformed into healthy, affordable meals, with menus changing according to what food is available.	**FRANCE Rejoué** Rejoué collects unwanted toys, games and books. They are sorted, cleaned and restored so that they can be sold or passed on and enjoyed by another child instead of being discarded. The organisation also provides employment and training opportunities.
NETHERLANDS Fairphone Fairphone designs smartphones to remain useful for longer. Its modular designs allow parts such as batteries and screens to be replaced rather than replacing the whole phone when one component breaks or wears out.	**AUSTRIA Repair Bonus / Geräte-Retter-Prämie** Austria has used financial incentives to make repairing electrical appliances cheaper for households. Instead of automatically replacing a broken appliance with a new one, people receive support towards the cost of having eligible products repaired.	**NETHERLANDS De Clique** De Clique collects separate organic waste streams from businesses, including coffee grounds, orange peel and food waste. These materials become resources for new products — for example mushrooms grown using coffee grounds and other products made from food by-products.

Activity 6 – 7Rs Analysis Worksheet

Case Study	Circle which of the 7Rs apply and star (*) the MOST significant one	Explain your reasoning
WISP – South Africa	Redesign / Rethink / Reduce / Reuse / Repair / Renew / Recover / Recycle	
FoodFlow – Kenya	Redesign / Rethink / Reduce / Reuse / Repair / Renew / Recover / Recycle	
Planet 3R – Nigeria	Redesign / Rethink / Reduce / Reuse / Repair / Renew / Recover / Recycle	
soleRebels – Ethiopia	Redesign / Rethink / Reduce / Reuse / Repair / Renew / Recover / Recycle	
Down to Earth Community Café – UK	Redesign / Rethink / Reduce / Reuse / Repair / Renew / Recover / Recycle	
Rejoué – France	Redesign / Rethink / Reduce / Reuse / Repair / Renew / Recover / Recycle	
Fairphone – Netherlands	Redesign / Rethink / Reduce / Reuse / Repair / Renew / Recover / Recycle	
Repair Bonus – Austria	Redesign / Rethink / Reduce / Reuse / Repair / Renew / Recover / Recycle	
De Clique – Netherlands	Redesign / Rethink / Reduce / Reuse / Repair / Renew / Recover / Recycle	

Activity 8 – Case study: Before and After

Sample Pictures



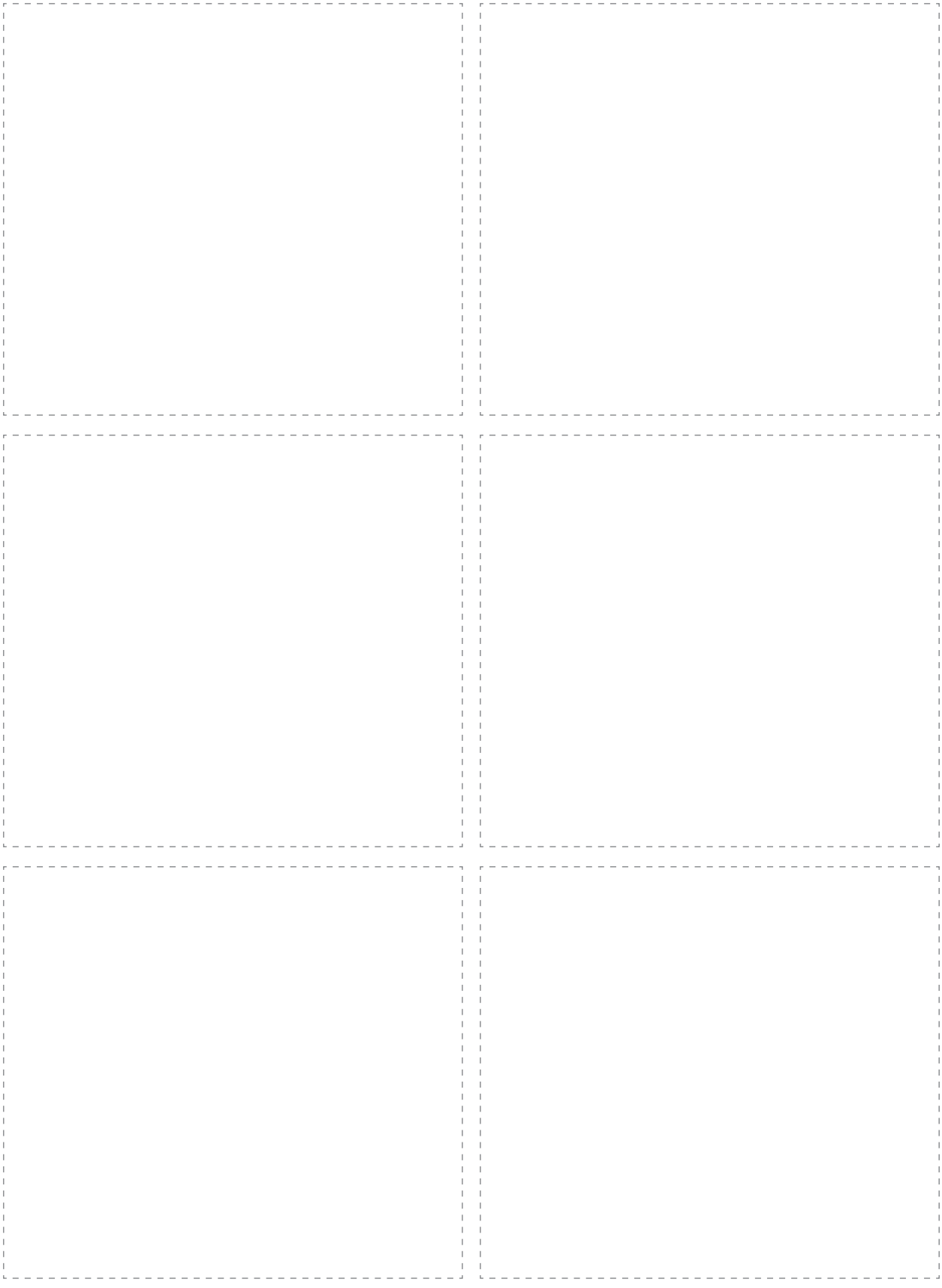












Activity 8 – Case study: Before and After

Worksheet 1 – In Search of the Truth!

Climate sceptics on Planetery Health Diet Argument 1:

_____

_____

_____

_____

_____

Planetery Health diet counter-arguments:

- _____
- _____
- _____
- _____
- _____

Climate sceptics on Planetery Health Diet Argument 2:

_____

_____

_____

_____

_____

Planetery Health diet counter-arguments:

- _____
- _____
- _____
- _____
- _____

Climate sceptics on Planetery Health Diet Argument 3:

_____

_____

_____

_____

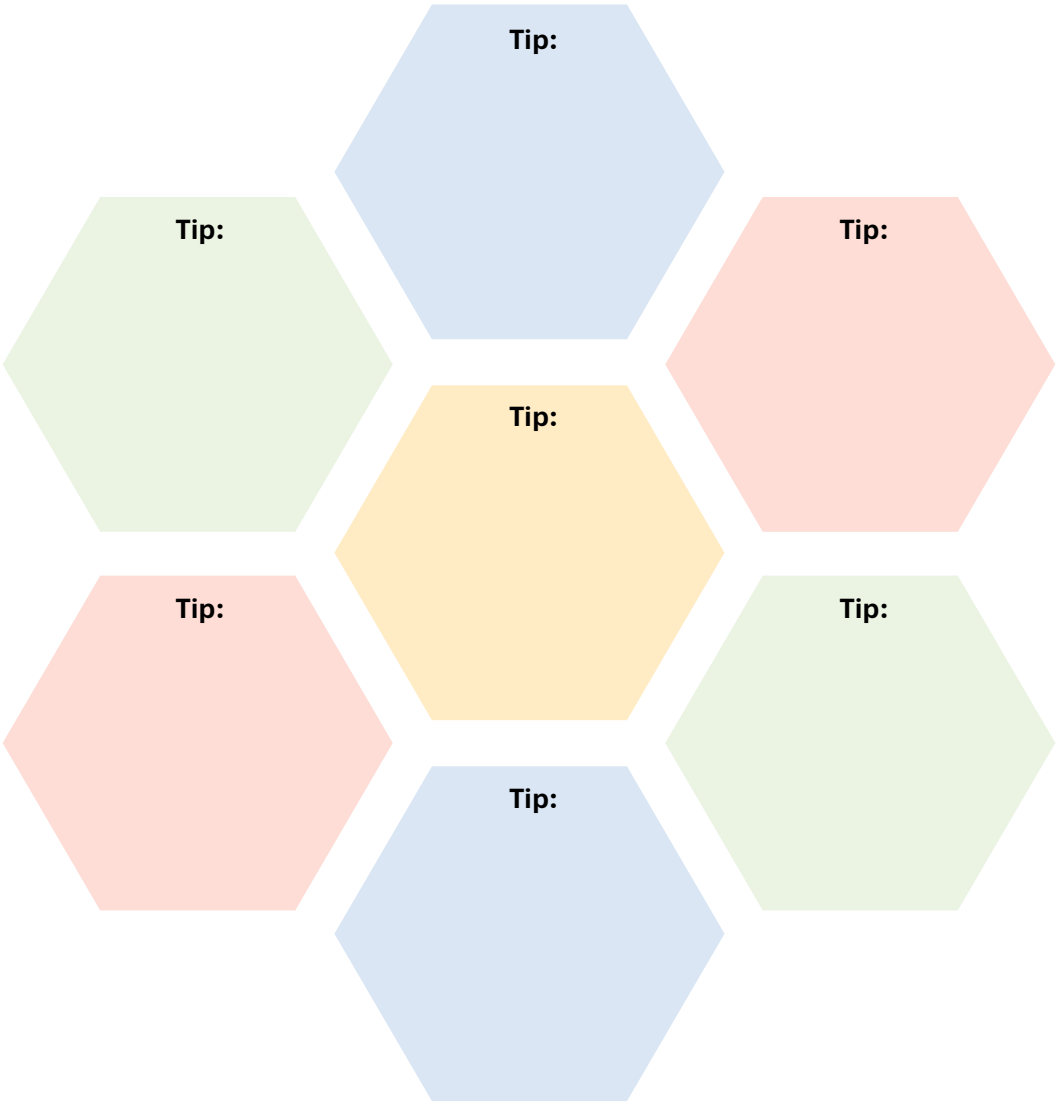
_____

Planetery Health diet counter-arguments:

- _____
- _____
- _____
- _____
- _____

Activity 8 – Case study: Before and After

Worksheet 2 – A Planetary Health Diet – Let's Go For It!



Examples of Plant-forward Snacks/ Simple Dishes		

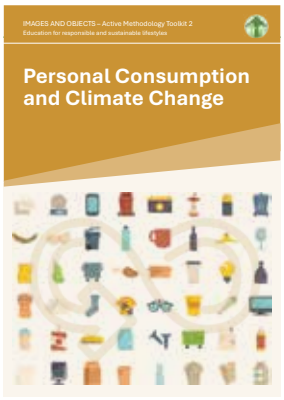
Activity 8 – Case study: Before and After

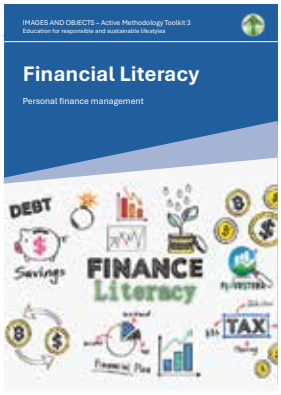
Worksheet 3 – Taste Test form

Directions: Circle the number that best answers each question. 1 is the worst and 3 is the best.			
	1 ☹	**2** 😐	**3** ☺
1) How does the food look?	1	2	3
2) How does the food taste?	1	2	3
3) How does the food feel in your mouth? What textures do you feel?	1	2	3
4) How does the food smell?	1	2	3
5) How would you rate the food overall?	1	2	3
6) What would you name this snack/dish?			
7) Is there anything else you want to say about the food? (Is there something you liked or disliked, or suggest changing?)			
Thank you!			
Taster code number:	Date:		

The *Images and Objects* Active Methodology Toolkit series

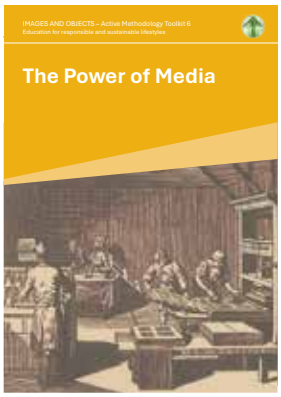


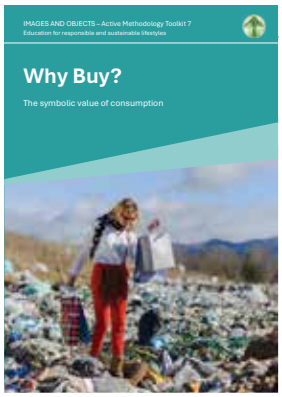


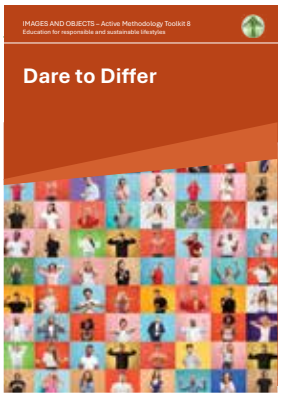


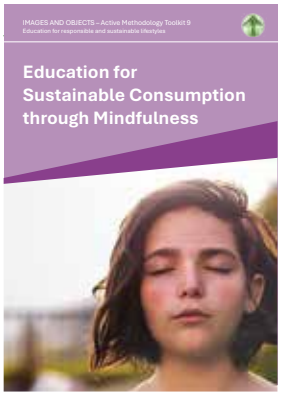






















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“There is no such thing as ‘away.’
When we throw anything away,
it must go somewhere.”

Annie Leonard





