

# SDG Learning Organiser – Year 3 Sum 2– Is sustainability about giving things up?

## Prior Learning (What we already know):

- To explore responsible consumption in the past
- To compare responsible consumption within the household from the past and today
- To describe different land uses of the local area
- To understand how climate can effect land use
- To explore problems and suggest solutions
- To explore patterns of land use in the local area

## New Learning:

- To evaluate the success / failure of the Railways in relation to sustainable energy
- To explore the pros and cons of fracking in the UK
- To explore factors that influence farming and the impact of over farming on the environment
- To identify the causes and consequences of food waste
- To locate where food is produced

## New Global Development Skills:

- I can use dates and terms related to the study unit and passing of time
- I can sequence several events or artefacts (or photos of artefacts)
- I can use a range of sources to find out about a period
- I can observe small details – artefacts (or photos of artefacts), pictures
- I can look at representations of the period – museum, cartoons etc
- I can select and record information relevant to the study
- I can begin to use the library and internet for research
- I can make comparisons with life today

## Key Questions:

- How have trains changed over the last 100 years?
- Why were steam trains used so widely even though they were harmful to the environment?
- Why has the main power source for locomotives changed from coal, to diesel, to electricity?
- Why were the Luddites opposed to improving technology?
- Describe what sustainable development means. In your own words, how can we live more sustainably?
- Determine what environmental issues are facing our planet.
- What solutions can you suggest for these issues?
- Debate impacts of intensive arable farming on the environment.
- Suggest how organic farming can help to reduce these impacts.
- Recall where our food comes from.
- Predict what the environmental impacts of transporting food are.



## Vocabulary:

Revolution, sustainable, coal, diesel, electric, carbon dioxide, sulphur dioxide, greenhouse gas, public transport, decade, Fracking, Intensive farming, Food waste, influence, impact, cause, consequence, locate, produce, produced, production, product

## Key Facts:

- Each year, an estimated one third of all food produced – equivalent to 1.3 billion tonnes – ends up rotting in the bins of consumers and retailers, or spoiling due to poor transportation and harvesting practices.
- If people switched to energy efficient light bulbs the world would save US\$120 billion annually
- Should the global population reach 9.6 billion by 2052, the equivalent of almost three planets could be required to provide the natural resources needed to sustain current lifestyles
- Less than 3% of the world's water is fresh (drinkable), of which 2.5 per cent is frozen in the Antarctica, Arctic and glaciers. Humanity must therefore rely on 0.5 per cent for all of man's ecosystem's and freshwater needs.
- Humankind is polluting water in rivers and lakes faster than nature can recycle and purify
- More than 1 billion people still do not have access to fresh water.
- Excessive use of water contributes to the global water stress.
- Water is free from nature, but the infrastructure needed to deliver it is expensive.
- Water use has been increasing worldwide by about 1 per cent per year since the 1980s.
- Agriculture (including irrigation, livestock and aquaculture) is by far the largest water consumer, accounting for 69per cent of annual water withdrawals globally. Industry (including power generation) accounts for 19per cent and households for 12per cent.

## Key Resources:

Twinkl  
BBC Bitesize  
United Nations SDG

## Can I do this?

- I can place different events in rail history on a timeline
- I can compare different locomotives and explain how the advances improved them
- I can understand why some people opposed the progress. Compare this to why some people oppose some travel technology now (environmental impact) and why that wasn't important for many at the time (they didn't know about it)
- I can understand what fracking is
- I can explain how fracking affects farming in the UK
- I can explain the negative impact of intensive farming impacts the environment
- I can explain that food is made in different locations across the country
- I can explain the need to transport food across the country
- I can explain why food is wasted
- I can explain what impact wasting food has on the environment