Nelson English Usage

Digital resources for the Australian Curriculum

Sustainability crossword – Answers

The sustainability crossword is written to familiarise students with terms and concepts relevant to sustainability, which is a cross-curriculum priority in the Australian Curriculum, relevant to all subjects. Although the sustainability crossword is designed as a tool for English, it is also suitable for use in other subjects – especially science and history.

Student answers will vary, in length, style, tense, point of view and so on. A clue should not be considered wrong if a student chooses to use an example as the clue rather than a definition. For example:

- For 'biofuels', 'bioethanol and biodiesel' is an acceptable clue
- For 'ethical consumerism', 'choosing to buy cruelty-free products' is an acceptable clue
- For 'wetlands', 'a marsh or swamp' is an acceptable clue.

The important thing is that the students research the meaning of each term and show that they at least partially understand it within the clue that they write. By researching each term on various websites (not Wikipedia), students will retain the information longer, and completing someone else's crossword will also help them to retain the information.

Another thing you could do at the end of the swap is to go through the list of example clues with the students and start a discussion about whether some terms are harder to understand than others, how they relate, and how closely their clues matched the examples.

Example clues

1 Biosphere

the part of the Earth that is populated by organisms

2 Ecosystem

a community of the living and non-living environmental factors of an area, and their interactions with one another and the environment

3 Biodiversity

the degree of variation between life forms on the Earth, or in a given habitat, ecosystem or biome

4   Ecology

the study of ecosystems and changes in the environment

5   Wetlands

a water-saturated land area, such as a marsh or swamp

6   Earth science

a type of science concerned primarily with the Earth and its atmosphere

7   Permaculture

the design, development and engineering of sustainable and self-sufficient agricultural
ecosystems and architecture

8   Green building

the practice of creating and using environmentally responsible, sustainable and efficient
processes throughout a building's lifecycle, from planning and design to construction and
renovation, all the way to demolition

9   Urban planning

architecture and design that primarily deals with the planning, use and organisation of urban
spaces, such as those in land developments, settlements and public transport networks

10   Human impact

the impact and effect of human activity on the environment and resources; such as pollution
and extinction of other species

11   Ethical consumerism

the practice of buying products that the consumer believes are produced and distributed
ethically; usually this includes the purchase of items that are considered fair-trade, cruelty-free,
vegan, recycled, locally made or organic

examples include the purchase of free-range eggs rather than cage eggs, or fair-trade coffee
rather than regular coffee, and the avoidance of conflict diamonds

12   Climate change

significant and long-term changes to the Earth's climate, more specifically its weather patterns,
over decades and millennia; types of changes include volcanic activity and global warming

13   Carbon footprint

the total carbon emitted by a particular individual, organisation or group due to their
consumption of fossil fuels

14   Sustainable development

development and use of resources that fulfils human needs responsibly, so that the environment
is preserved and such needs can be met both now and in the future

15 Social equity

when all people in a given society are considered to have the same status in various ways, usually including fair and equal treatment under the law, freedom of speech, the right to vote, the right to own property, and so on

16 Consumption

the use of a resource

17 Population control

government programs aimed at controlling growth in a population, whether plant, animal or human

18 Pollution

a substance or object with toxic or harmful effects that is present or introduced into an environment and causes adverse changes

19 Reduce, reuse, recycle

a three-tiered approach to waste management that aims to reduce landfill and save water and energy

20 Ecodesign

a design strategy that considers the full potential environmental impact of a new product during its lifecycle

21 Waste hierarchy

the 3Rs: reduce, reuse, recycle

22 Environmental management

the management of interactions between human societies and the environment

23 Clean energy

energy that meets the needs of the present while not adversely affecting the ability of future generations to also meet their needs

24 Solar power

power that is obtained by utilising the energy of the Sun

25 Carrying capacity

the maximum population of a species that a given environment can support indefinitely with consideration to the water, food, habitat and other resources available in that environment

26 Land use

modification of the natural environment of land due to human use; for example building, planting crops, and so on

27   Desalination

a process used to remove salt and other minerals from salt water, usually for the purpose of

obtaining fresh water suitable for drinking and other human uses

28   Geothermal energy

energy created by the heat stored in the interior of the Earth

29   Renewable energy

energy derived from natural resources: the Sun, wind, rain, tides and heat in the interior of the

Earth

30   Biofuels

renewable energy resources derived from living matter, such as waste animal and plant matter

and algae