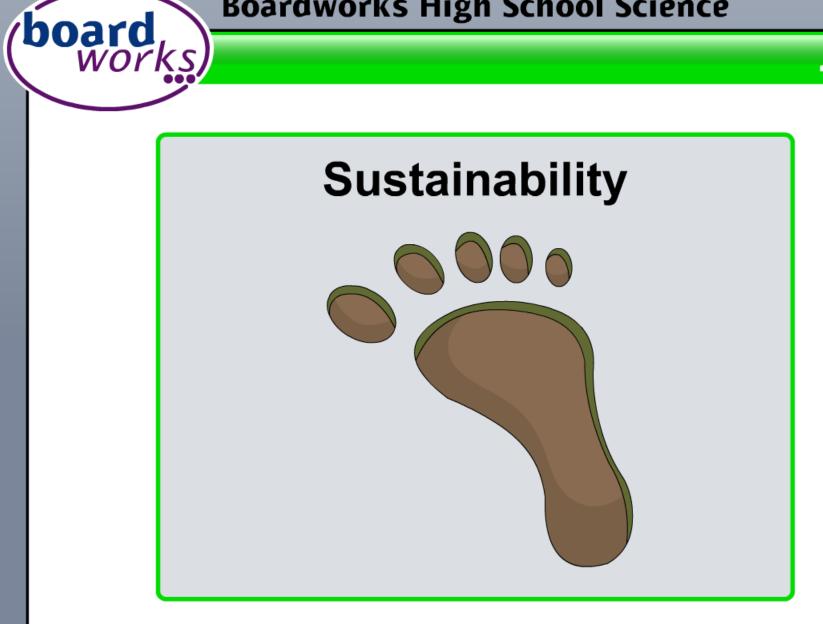
#### **Boardworks High School Science**



### What is sustainability?

(board works)

**Sustainability**, or **sustainable development**, is the ability to provide for the needs of the present without affecting the ability of future generations to provide for themselves.

A major aim of sustainable development is preventing **environmental degradation**. This is a process where natural resources such as plants, animals, water and fuel are consumed more quickly then they are replaced.



In the long-term, environmental degradation will result in an ecosystem that cannot support humans or other organisms.



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# What are ecological footprints?



An ecological footprint is the amount of land and water that is needed to produce all the food, energy and products that a typical person uses.

Ecological footprints are measured in **hectares**. One hectare is 10,000 m<sup>2</sup>, or about the size of a large football pitch.



The smaller the footprint, the lower the impact on the environment.



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## **Sustainable footprints**



The productive capacity of Earth is 11.4 billion hectares, and the average North American ecological footprint is 9.2 hectares per person.

The Worldwide Fund for Nature recommends that footprints need to be less than 2 hectares per person to avoid damaging the environment and wildlife.

How can ecological footprints be reduced?

- using sustainable products, such as organic food and wooden furniture from sustainable forests
- recycling materials such as paper, glass, plastic, metal and wood.



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# How do the ecological footprints of different regions vary?

