



What I should know already...

Children will have studied Food chains in Year 2

Key Skills

Children will develop an understanding of food chains and how humans can have a negative or positive impact on the local area and world through different types of pollution.

Children will work with information from secondary sources and consider and present evidence. They will take part in debates supporting, or not supporting, a point of view concerning climate change and how human beings can stop global warming.

It is also important for children to understand that natural events can destroy habitats and that food chains can be disrupted by naturally occurring events affecting either the whole habitat or an individual species (for example disease).

Diagram



Drought can affect crop growth and food production.



It is estimated that by the year 2100 due to Greenhouse gas emission, drought and temperature rise there will be decline in the production of major cereal crops (20–45 per cent in maize yields, 5–50 per cent in wheat and 20–30 per cent in rice). If the trends continue, in very near future crop losses may increase at an unprecedented rate which will substantially contribute to reduced production, spiked food prices, and it will become difficult to cope up with rising needs of growing population.

Key Vocabulary

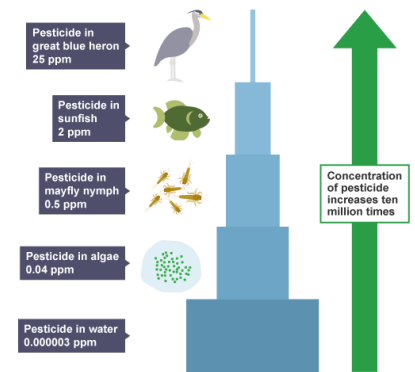
Pollution	The presence or introduction of a substance which has harmful or poisonous effects.
Food chain	A series of organisms each dependent on the next as a source of food.
Deforestation	The action of clearing a wide area of trees.
Global warming	The gradual increase in the average temperature of the earth's atmosphere caused by increased levels of CO ₂ , CFCs and other pollutants (greenhouse gases).
Environment	The natural world as a whole or a particular geographical area.
Biodiversity	The variety of plants and animals in the world or in a particular habitat.
Brownfield sites	A site that has been previously developed, but has become vacant.
Global	Relating to the whole world.
Climate	The weather conditions in a particular area or over a long period.
Derelict	In very poor condition as a result of disuse and neglect.

Misconceptions

Children may also not connect housing developments that look like pleasant places to live with the destruction of habitats that may have been involved in their creation, and they may also not realise that derelict and brownfield sites can contain great biodiversity.

How environmental factors can pose dangers to living things

Chemical pesticides are substances that are sprayed onto crops to kill organisms and disease that can reduce plant growth such as weeds, insects and fungi. Weeds compete with the crop plants for resources, fungi can cause plant diseases and insects may consume the plants and damage them. Because the animals tend to eat lots of organisms from the level below in food chains, the concentration of pesticide in the bodies of organisms increases at higher levels of food chains.



This can result in the toxicity of the pollutant reaching fatal levels in the organisms at the top of the food chain.

Key Questions

How has the change in land use in our local area affected habitats of wild creatures?

How can greenhouse gases affect climate and the food chain for humans?

How does deforestation affect the environment?

Why is biodiversity important?

What can we do to look after our world?

Recommended reading

