

Element 1.1: The meaning of environment, weather, climate, habitats, ecosystems, biodiversity, pollution and sustainability

Take a moment to write down what makes up the environment around you.



Element 1.1: The meaning of environment, weather, climate, habitats, ecosystems, biodiversity, pollution and sustainability

Match the following animals and plants with their likely habitat:

- | | |
|--------------|------------------------|
| 1. Seaweed | (a) deciduous woodland |
| 2. Blackbird | (b) intertidal rocks |
| 3. Pine tree | (c) hot desert |
| 4. Scorpion | (d) heath or moorland |
| 5. Heather | (e) pond or lakeside |
| 6. Bulrush | (f) alpine mountain |

Answers are at the end of this section.



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Herds of animals, such as zebra, graze on grasslands in southern and eastern Africa. What effects could they have on their environment?



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Look at the photograph of the dead fish on the beach.
Why do you think the fish has died?



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How might your organisation be causing pollution?

How could you as an individual cause pollution?



Element 1.1: The meaning of environment, weather, climate, habitats, ecosystems, biodiversity, pollution and sustainability

What sources of environmental pollution do you think your organisation is responsible for?



Write these down, distinguishing between those sources that the organisation is **directly** responsible for and those where it has some **indirect** responsibility.

Element 1.2: The importance and benefits of sustainable development

What do you think sustainability means for your organisation?

Write down some bullet points and review them after you have read this section.



Element 1.2: The importance and benefits of sustainable development

Make a note of all the opportunities that you can think of for your organisation to use less oil. In other words, what oil-based materials could you:

- Use less?
- Substitute with more sustainable materials?
- Recycle?



Element 1.2: The importance and benefits of sustainable development

What ethical supply chain considerations are present in your organisation?



A large rectangular box with a blue border, containing seven horizontal blue lines for writing.

Element 1.2: The importance and benefits of sustainable development

Go back to the points that you wrote down at the beginning of this section.



Have your thoughts on the meaning of 'sustainability' for your organisation changed at all?

Element 2.1: Principles and practice of impact assessments

What effects do you think the power station might be having on the environment?



Element 2.1: Principles and practice of impact assessments

Can you apply the source-pathway-receptor model to any of your organisation's activities?



Element 2.1: Principles and practice of impact assessments

What environmental impacts do you think your organisation has?

Write down some ideas – we will come back to them later.



Element 2.1: Principles and practice of impact assessments

Does this mean that such organisations have no environmental aspects or impacts? What do you think?



Element 2.1: Principles and practice of impact assessments

Look at the diagram showing the life cycle of a washing machine. Which stage(s) in the life cycle of a washing machine do you think are associated with the greatest environmental impacts?



Element 2.1: Principles and practice of impact assessments

Using what you have learnt about life cycle analysis, identify the stages in the life cycle of a plastic spoon, including the inputs and outputs at each stage.



Element 2.2: The main sources, types, controls and impacts of air pollution

Write down as many types of fossil fuel as you can think of.



Element 2.2: The main sources, types, controls and impacts of air pollution

How could you eliminate car exhaust emissions?



How could a power company eliminate all sulphur dioxide emissions from their energy generation?

Element 2.2: The main sources, types, controls and impacts of air pollution

How does your organisation eliminate or minimise any air pollutants associated with its activities?



Write down your ideas.

Element 2.3: The main sources, controls and impacts of water pollution

What do you think is the likely outcome of a spillage of a hazardous liquid such as diesel oil?



Element 2.3: The main sources, controls and impacts of water pollution

Do you think there is any risk of spills of hazardous liquids at your place of work?



What liquids might be involved?

Element 2.3: The main sources, controls and impacts of water pollution

How could you minimise your water consumption at home?



Element 2.3: The main sources, controls and impacts of water pollution

Think of the opportunities that your organisation might have to save water. Try to write down at least three ideas.



Element 2.4: The main sources, controls and impacts of environmental noise

Think about occasions when you have been disturbed by noise.

Write down the sources of the noise that troubled you.



Element 2.4: The main sources, controls and impacts of environmental noise

Does your organisation create noise in the environment?

Has your organisation ever had any complaints about noise?



Element 2.5: Types of waste

What do you routinely dispose of at home?

Write down these items and materials.



Element 2.5: Types of waste

Write down the discarded items and other materials that your organisation routinely disposes of as waste.



Group these under the following waste categories:

- inert;
- hazardous; and
- non-hazardous.

Element 2.6: Waste management

Imagine your organisation manufactures food packaging.
What might be some benefits and limitations of using recycled materials instead of new 'virgin' materials?



Element 2.6: Waste management

List the types of waste material that your organisation currently sends for disposal.



Are there opportunities for moving any of these materials up the waste hierarchy?

Element 2.6: Waste management

How much of the waste produced in your household is made up of packaging for food, drink and cleaning products?



Element 2.7: Dealing with environmental emergencies

Are oils, other fuels or other hazardous liquids stored on your site?



If so, how are they stored?

Do you think that they are stored safely?

Element 2.7: Dealing with environmental emergencies

Is there an emergency response plan at your place of work?
Does it cover any potential environmental emergencies?



Element 2.7: Dealing with environmental emergencies

Go back to the ideas that you wrote down in Element 2.1 of this element.



Have your thoughts about the environmental impacts of your organisation changed at all?
