



Science Focus Unit 1 – Interactions and Ecosystems  
Review Booklet

**Topic 1 Interactions Within an Ecosystem**

What is the Science of **Ecology**? (p. 6)

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Describe the work an **ecologist** would do. (p. 6-7)

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Describe the **basic needs** of all living organisms. (p. 8)

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Explain what an **adaptation** is and provide examples of how organisms '**adapt**' to their environments. (p. 10-11)

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Describe the **interdependent relationships** of organisms within a particular ecosystem. (p. 14-15)

**Symbiosis**

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**Commensalism**

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**Mutualism**

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**Parasitism**

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Science Focus Unit 1 – Interactions and Ecosystems  
Review Booklet

What **impact** do certain organisms have on their environment (give specific examples) (p. 16)

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**Topic 2 Human Impacts on Ecosystems**

What are **natural resources** and how do humans use them? (p. 18-19)

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How have the interactions that people have within an environment **changed over time**? (p. 20-21)

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How do human **needs and wants** impact natural environments? (p. 22-23)

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Can we **predict what impacts** humans have within an ecosystem? (p. 24-25)

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How can **natural disasters** impact the environment?

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**Topic 3 Environmental Choices**

What is an **ecological footprint** and how is it calculated? (p. 29-31)

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Science Focus Unit 1 – Interactions and Ecosystems  
Review Booklet

How can our understanding and knowledge of **Science and Technology** enable us to how we affect our environment? (p. 30-31)

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How can this assessment then be used to **reduce our impact**? (p. 33, 35)

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**Topic 4 How Organisms Interact**

Explain the difference between **biotic** and **abiotic** parts of the environment. (p. 38)

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What is a **niche**? (p. 38)

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Describe different **niches** within a particular environment. (p. 40)

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Explain the difference between a **food chain** and a **food web**. (p. 42-43)

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Explain how the **pyramid of numbers** can demonstrate the health of an ecosystem. (p. 43)

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Science Focus Unit 1 – Interactions and Ecosystems  
Review Booklet

Describe the roles of the *scavengers and decomposers*. (p. 44-45)

Scavengers	Decomposers

**Topic 5 Cycles in the Environment**

Describe and Illustrate the *Energy cycle*. (p. 42)

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Describe and Illustrate the *Carbon cycle*. (p. 49)

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Science Focus Unit 1 – Interactions and Ecosystems  
Review Booklet

Describe and Illustrate the **Water cycle**. (p. 51 )


Define **pollution** and give specific examples. (p. 52)

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What is **bioaccumulation** (also called, **biomagnification**) and what effect does it have within the food chain?. (p. 53-54)

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**Topic 6 Succession and Change in Ecosystems**

Describe **primary succession** and **secondary succession**. (p. 56-57)

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How well do organisms **adapt** to human invasion in an ecosystem? (p. 60)

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Describe different ways that **pests** can be controlled in an ecosystem. (p. 61-62)

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Science Focus Unit 1 – Interactions and Ecosystems  
Review Booklet

What impact can the introduction of **exotic species**, by humans, have on an ecosystem? (p. 62-63)

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Describe the difference between **extinction** and **extirpation**? (p. 64)

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What are the main reasons why a **species** could be **at risk**? (p. 64)

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**Topic 6 Environmental Monitoring**

What are some techniques used to check (**monitor**) the condition of an environment? (p. 68-70)

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What is an **environmental impact assessment**? (p.74, 78)

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Notes Index <http://www.edquest.ca/Notes/noteindex7.html>

Review Quiz Index <http://www.edquest.ca/Tests/testindex7sf.html>

**SCIENCE FOCUS 7 Textbook**

Unit At a Glance p. 84

Unit Review pgs. 84- 87