

Interactions and Ecosystems Review

How do human activities affect ecosystems?

What methods can we use to observe and monitor change in ecosystems?

How can we assess the impacts of our actions?

Key Concepts (Unit At A Glance Science Focus 7 p. 84)	Guiding Questions and Activities to Help you Study
Topic 1 Interactions Within an Ecosystem	<ul style="list-style-type: none"> - What is the Science of Ecology? (p. 6) - Describe the work an ecologist would do. (p. 6-7) - Describe the basic needs of all living organisms. (p. 8) - Explain what an adaptation is and provide examples of how organisms 'adapt' to their environments. (p. 10-11) - Describe the interdependent relationships of organisms within a particular ecosystem. (p. 14-15) - What impact do certain organisms have on their environment (give specific examples) (p. 16)
Topic 2 Human Impacts on Ecosystems	<ul style="list-style-type: none"> - What are natural resources and how do humans use them? (p. 18-19) - How have the interactions that people have within an environment changed over time ? (p. 20-21) - How do human needs and wants impact natural environments? (p. 22-23) - Can we predict what impacts humans have within an ecosystem? (p. 24-25) - How can natural disasters impact the environment?
Topic 3 Environmental Choices	<ul style="list-style-type: none"> - What is an ecological footprint and how is it calculated? (p. 29-31) - How can our understanding and knowledge of Science and Technology enable us to how we affect our environment? (p. 30-31) - How can this assessment then be used to reduce our impact? (p. 33, 35)

Topic 4 How Organisms Interact	<ul style="list-style-type: none"> - Explain the difference between biotic and abiotic parts of the environment. (p. 38) - What is a niche? (p. 38) - Describe different niches within a particular environment. (p. 40) - Explain the difference between a food chain and a food web. (p. 42-43) - Explain how the pyramid of numbers can demonstrate the health of an ecosystem. (p. 43) - Describe the roles of the scavengers and decomposers. (p. 44-45)
Topic 5 Cycles in the Environment	<ul style="list-style-type: none"> - Describe the Energy cycle. (p. 42) - Describe the Carbon cycle. (p. 49) - Describe the Water cycle. (p. 51) - Define pollution and give specific examples. (p. 52) - What is bioaccumulation (also called, biomagnification) and what effect does it have within the food chain?. (p. 53-54)
Topic 6 Succession and Change in Ecosystems	<ul style="list-style-type: none"> - Describe primary succession and secondary succession. (p. 56-57) - How well do organisms adapt to human invasion in an ecosystem? (p. 60) - Describe different ways that pests can be controlled in an ecosystem. (p. 61-62) - What impact can the introduction of exotic species, by humans, have on an ecosystem? (p. 62-63) - Describe the difference between extinction and extirpation? (p. 64) - What are the main reasons why a species could be at risk? (p. 64)
Topic 7 Environmental Monitoring	<ul style="list-style-type: none"> - What are some of the techniques used to check (monitor) the condition of an environment? (p. 68-70) - What is an environmental impact assessment? (p.74, 78)

Design a Concept Map linking the ideas introduced and reinforced in this Unit on Interactions and Ecosystems.

Try some of the Practice Quizzes on Edquest.ca to see how much you have recalled from this Unit