



Wild Ways Kids Academy

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Web of Life: Understanding Nature's Connections

Age Group: 8–13 years **Duration:** 45–60 minutes

Materials

- Paper or card (for writing/drawing organisms)
- Markers or pens
- Sticky notes (optional, for quick labels)
- Open space (indoors or outdoors for movement activities)

Optional (for extension or prep):

- Printed animal/plant role cards
- Clipboards (for outdoor observations)
- Crayons or coloured pencils (for drawing activities)

Lesson Objective

Students will learn how living things are connected within ecosystems through food chains and food webs, and understand the importance of each organism in maintaining balance in nature.

Learning Outcomes

By the end of this lesson, students will be able to:

- Explain what a **food chain** is
 - Identify the roles of **producers, consumers, predators, and prey**
 - Understand the concept of **trophic levels**
 - Describe what a **food web** is
 - Recognise that ecosystems are **interconnected systems**
 - Predict how changes in one part of an ecosystem can affect others
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Key Concepts to Teach

Energy Flow in Nature

All life on Earth depends on energy from the **sun**. This energy is passed from one organism to another through feeding relationships.

Emphasise:

Energy always starts with the sun and moves through living things.

What is a Food Chain?

A **food chain** shows how energy moves from one organism to another in an ecosystem.

It represents **who eats who**.

Example:

Grass → Grasshopper → Frog → Snake → Hawk

Key idea:

Each organism depends on the one before it for energy.

Producers

Producers are living things that make their own food using sunlight (photosynthesis).

Examples:

- Plants
- Grass
- Algae

Important:

All food chains begin with a producer.

Consumers

Consumers are living things that cannot make their own food and must eat other organisms.

Types of consumers:

- **Primary consumers** – eat plants (herbivores)
- **Secondary consumers** – eat plant-eaters
- **Tertiary consumers** – eat other predators

These levels are called **trophic levels**.

Predators and Prey

- A **predator** is an animal that hunts and eats other animals
- **Prey** is the animal that is eaten

Example:

A snake is a predator, and a frog is its prey.

Habitat

A **habitat** is the natural home where an organism lives.

Important connection:

Animals depend on their habitat for food, water, and shelter.

What is a Food Web?

A **food web** is made up of many food chains connected together.

It shows how animals and plants are linked in more complex ways.

Key idea:

Most animals eat more than one type of food, so ecosystems are not simple chains — they are webs.

Interconnected Ecosystems

All organisms in an ecosystem are connected.

If one part changes:

- Other parts are affected
- The whole system can become unbalanced

Example prompts:

- What happens if plants disappear?
 - What happens if there are no predators?
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Teaching Notes for Educators

- Use real-life or local wildlife examples where possible
 - Encourage learners to **think, predict, and question** rather than memorise
 - Reinforce that **every organism plays a role**, no matter how small
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Transition to Activities

Once learners understand:

- Food chains
- Roles in ecosystems
- How food webs work

Move into interactive activities

Activity 1: Build a Food Chain

Objective:

Help learners understand how energy moves through a simple food chain.

Instructions:

- Give each learner (or small group) an organism (e.g. grass, insect, frog, snake, bird)
- Ask them to move around the space and find where they belong in a food chain
- Once they think they are correct, have them stand in a line

Discussion:

- Where does the energy start?
- What would happen if one part of the chain was missing?

Reinforce:

Food chains show how energy flows from one organism to another.

Activity 2: Food Chain Mix-Up (Turning Chains into Webs)

Objective:

Show how food chains connect to form food webs.

Instructions:

- Keep learners in their roles from the previous activity
- Introduce new organisms (e.g. mouse, seeds, insects, birds)
- Tell learners they can now connect to more than one food source
- Learners link arms or hold hands with multiple others

Discussion:

- Does this still look like a straight line?
- What has changed?

Explain:

This is a **food web**: many food chains connected together.

Activity 3: Ecosystem Domino Effect

Objective:

Help learners understand how changes affect the entire ecosystem.

Instructions:

- Learners remain in their food web connections
- Call out a scenario, for example:
 - “There is a drought and plants die”
 - “All the frogs disappear”
 - “Too many predators arrive”
- Any affected learners must sit down
- Ask learners to decide who else is affected and should also sit

Discussion:

- What happened to the rest of the system?
- Did the effects spread?

Reinforce:

When one part of the ecosystem is affected, everything else can be impacted.

Activity 4: Predator & Prey Challenge

Objective:

Help learners understand predator-prey relationships.

Instructions:

- Assign roles: predators and prey
- Create a simple tag-style game:
 - Predators try to “catch” prey
 - Prey must avoid being caught
- After a round, remove or add predators

Discussion:

- What happens when there are too many predators?
- What happens when there are too few?

Reinforce:

Balance between predator and prey is important for ecosystem health.

Activity 5: What If...? Scenario Challenge

Objective:

Develop critical thinking and systems thinking.

Instructions:

Present scenarios such as:

- “What if all insects disappeared?”
- “What if pollution killed the plants?”
- “What if one species became too dominant?”

Learners must:

- Predict what would happen
- Share their reasoning

Discussion:

Encourage different ideas and explore consequences together.

Reflection

Ask learners:

- What surprised you about how ecosystems work?
- Is any organism unimportant?
- How can we help protect the web of life?

Final message:

Nature is not just a chain, it is a web, and every living thing plays a role.

Wild Ways Connection

When wildlife is removed, injured, or harmed, it doesn't just affect one animal — it can affect the entire ecosystem.

Every action we take to protect wildlife helps keep the **web of life strong and balanced**.