

living-things

Food chains, webs and interdependence

Lesson at a glance

Open with the hedgerow hook: a fox needs a rabbit, a rabbit needs grass — what if the grass disappears? Model energy flow live with cards, naming producer, consumer and food chain, then build two Irish chains on the interactive board (grass → rabbit → fox; oak leaves → caterpillar → robin) as pupils call the order. Groups join picture cards into a small food web with shared animals, draw it on the Investigation Journal page, then lift one link from a front-table web and talk through knock-on effects and interdependence.

Learning objectives

- Build Irish food chains from a producer to consumers on the interactive board
- Join feeding links into a simple food web where each living thing appears once
- Predict and discuss what happens when one link is removed

Before the bell – prep

Print and cut one full food-web card set plus about eight arrow cards per group the day before; bag each set with a short length of string or wool. Keep sun/grass/rabbit/fox and sun/oak leaves/caterpillar/robin ready to drag on the board, plus one spare pack for the front-table remove-a-link web.

Materials

Item	Qty	Per	Source	Low-cost substitute
food-web picture cards (sun optional on IWB only; print set: grass, oak leaves, clover, rabbit, caterpillar, slug, earthworm, robin, thrush, hedgehog, fox, buzzard)	1	group	provided printable	hand-written name cards on recycled paper if printing is limited
arrow cards labelled is eaten by	8	group	provided printable	strips of paper with a drawn arrow
string or wool lengths for marking shared links in a web	3	group	classroom	yarn, wool scraps, or reusable sticky tack links
envelopes or trays to hold each group's card set	1	group	classroom	ziplock bags or recycled boxes
Investigation Journal page	1	pupil	provided printable	plain paper if the journal page is unavailable

Safety watch-point

Card and string work only — no heat, tools or outdoor hazard. Mind trip hazards if groups carry a finished web to the front table.

Teaching moves

- **Energy on the move:** Write only energy path, producer, consumer and food chain on the board — hold food web and interdependence back. Model one chain aloud with three cards: sun → grass → rabbit → fox, saying the arrow means energy goes this way / is eaten by. Head off arrows drawn toward the prey and the idea that the sun is a producer before any group work starts.
- **Build an Irish food chain:** You drag; pupils call the order for sun, grass, rabbit, fox. Ask the watching class to agree each placement before you lock it. Prompt: Where does energy begin? Which card is the first living producer? If the arrow pointed the wrong way, what story would it tell?
- **Build another chain on the board:** Clear and repeat with sun, oak leaves, caterpillar, robin so they work the pattern again rather than remember it. Keep the finished order to yourself. If the class is confident, rebuild grass → rabbit → fox aloud with no cards on screen to show the pattern transfers.
- **Build chains and a web:** Sketch the thrush example (grass → slug → thrush and oak leaves → caterpillar → thrush) before trays open. Chunk orally: sort plants and animals, lay one plant-first path, join a second path on a shared animal with one card only, check every arrow faces the eater. Circulate naming producers out loud; use earthworm only as food for robin or hedgehog.
- **Record your food web:** Pupils draw their own group's web on the Investigation Journal page — five or six living things is enough. Remind them: clear starting plant, arrows in the energy direction, at least two paths linked, labels a classmate could read.
- **Remove a link:** Bring one finished group web (or rebuild a simple shared one) to the front table. Display interdependence once, take a silent hands-on-heads / hands-on-shoulders prediction, then physically lift a shared animal so arrows and string droop. Ask who loses food, who might have more, what happens to the plants; repeat once removing a producer.

What it should show

Board chains settle as sun → grass → rabbit → fox and sun → oak leaves → caterpillar → robin, arrows toward the eater. Group webs show a plant at the base of each path, one card per organism, and at least one shared animal with two or more links. Removing a consumer leaves some hunters short of food; removing a producer shocks the whole web. Odd webs usually have arrows the wrong way or start with an animal — re-ask which way energy travels.



Lesson 2

Misconceptions & interventions

- **Pupils draw arrows toward the prey because 'the fox chases the rabbit'.** — Trace the chain with a finger toward the eater and revoice: the arrow means energy goes this way, or is eaten by. Rebuild one wrong arrow on the board and ask what mistaken story it tells.
- **Pupils call the sun a producer or put an animal first in the chain.** — Hold the sun and grass cards side by side: the sun is the energy source; the first living producer is the green plant. Ask them to name the producer on their own tray before adding hunters.
- **When a link is removed, pupils think only the animal that ate it is affected.** — After lifting the card, push one step up and down the web: Who loses food? Who might have more? What might happen to the plants? Link lightly to why a web is safer than a single chain.

Differentiation

Emerging	Developing	Proficient
• Offer a starter trio (grass, rabbit, fox) already clipped together so the group has one working chain before joining a second path. • Sit with the teacher table to sort cards into plants and animals first, then place arrows only on a single short path.	• Challenge early finishers to add another shared link on the same card set, still with one card per living thing. • Ask why each arrow faces the way it does before they draw the web.	• Include the buzzard without breaking the producer-first rule, or argue why a web is safer than a single chain when one link disappears. • On the remove-a-link talk, predict a knock-on two steps away from the missing card.

Cross-curricular hook

Link to Geography local habitats — map the same producer–consumer links onto the school hedgerow, field or garden pupils already know.

