

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 with producer and consumer, then show the finished sun → grass → rabbit → fox chain on the interactive in display mode. Pupils call out placements while you drag sun, oak leaves, caterpillar and robin into order in explore mode. Groups build a simple Irish food web with picture and arrow cards, draw it in the Investigation Journal, then remove one front-table link to talk 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; bag each set with a short length of string or wool. Keep one spare set for a front-table web. Have the food-chain interactive ready in display mode, then switch to explore.

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	classroom	hand-written name cards on recycled paper if printing is limited
arrow cards labelled is eaten by	8	group	classroom	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	classroom	plain paper if the journal page is unavailable



Lesson 2

Safety watch-point

Supervise card and string tidy-up so small pieces stay off the floor; no other significant hazard in this desk-based build.

Teaching moves

- **Energy on the move:** Keep the board to energy path, producer, consumer and food chain only — hold food web and interdependence for later. Model one cycle aloud with three cards: sun energy into plant, arrows toward the eater. Gently correct any arrow drawn toward the prey and any claim that the sun is a producer.
- **A finished Irish food chain:** Run the interactive in display mode so sun → grass → rabbit → fox is already built. Ask where energy begins and what breaks if grass goes. Clarify once: sun is the energy source; grass is the first living producer. Do not let pupils drag yet.
- **Build the chain on the board:** Switch the interactive to explore with sun, oak leaves, caterpillar and robin. Do not read the finished order aloud. Drag as pupils call placements and check each one with the class. Prompt: which card is the producer, and what wrong story would a reversed arrow tell?
- **Build chains and a web:** Sketch the tiny thrush join on the board first, then open trays. Coach in beats: sort plants and animals, lay one plant-to-hunter path, add a second path sharing one animal (one card each), arrows toward eaters. Circulate and make every group name their producer before hunters go down.
- **Record your food web:** Pupils draw their own group's web in the Investigation Journal — five or six living things is enough. Look for a clear starting plant, energy-direction arrows, at least two linked paths, and labels a classmate could read.
- **Remove a link:** Bring one finished group web (or rebuild a spare) to the front. Silent prediction signal, then lift a shared animal and let arrows droop. Ask who loses food, who might gain, and what happens to plants. Repeat once with a producer removed so the base shock lands.

What it should show

Successful webs start with a plant, use one card per organism, show at least two short paths joined at a shared animal (e.g. thrush or rabbit), and arrows face the eater. A chain that starts with an animal, reversed arrows, or duplicate animal cards means the join rule or energy direction needs a quick re-model at that table.



Misconceptions & interventions

- **Pupils draw arrows toward the prey because 'the fox chases the rabbit'.** — Trace one chain with a finger and say the arrow means 'energy goes this way' or 'is eaten by'. Flip any wrong arrow and ask what mistaken story it told.
- **Pupils call the sun a producer or put an animal first in the chain.** — Hold up a plant card beside the sun: sun is the energy source; the first living producer is the green plant. Rebuild from the plant before any consumer is placed.
- **When a link is removed, pupils think only the animal that ate it is affected.** — After lifting the card, push one step up and one step down: who loses food, and what might happen to the plants below? Name that ripple interdependence.

Differentiation

Emerging	Developing	Proficient
• Offer a starter trio already clipped together (grass, rabbit, fox) so the group can extend outward rather than start from a full shuffled pack. • Sit briefly at the teacher table and have them name producer then consumer before placing any arrows.	• Prompt a second shared link on the same web and a spoken check that every arrow faces the eater. • Ask why a web might be safer than a single chain when one food disappears.	• Challenge them to add the buzzard without breaking the producer-first rule, or to include another shared join. • In the remove-a-link talk, ask them to predict a second knock-on beyond the animal that ate the missing link.

Cross-curricular hook

Link lightly to Irish habitat and biodiversity care — pollinator or hedgerow loss ripples through the same webs pupils built.