

Nova's Food Chain Investigator

Learning objective: To construct and interpret food chains, identifying producers, primary consumers, secondary consumers, and tertiary consumers.

Join Nova the owl in the forest! Use your scientific knowledge to complete this food chain record. Look at the living things in a local habitat and decide which organism is the producer (getting energy from the sun) and which are the consumers. Remember to draw arrows pointing in the direction that energy flows.

Word bank: Producer · Consumer · Herbivore · Carnivore · Omnivore · Energy · Photosynthesis · Predator · Prey

1. The Producer: Identify an organism that produces its own energy from sunlight and explain how it starts the food chain. (2 marks)

2. The Primary Consumer: Name an animal that eats the producer and explain why it is classified as a herbivore. (2 marks)

3. The Predator: Name a secondary or tertiary consumer in your chain and describe its role as a predator. (2 marks)

4. Energy Flow: Explain what the arrows in a food chain represent and why they must point from the prey to the predator. (3 marks)

5. The Impact of Change: If the producer in your food chain were to disappear, what would happen to the rest of the animals in the chain? Explain your reasoning. (3 marks)

Extension challenge: Research a 'food web' instead of a single chain. How does the ecosystem change when one animal has more than one food source?