

# Parts of an Ecosystem

Balance Base with Linkling

## Learning target

Describe an ecosystem as interacting parts.



## Before you begin

Use the reference page and discussion prompts on their own, or open the optional browser adventure. No earlier lesson or physical kit is required.

For online play: use an internet-connected current browser with local storage enabled. Read the three-part Gemling briefing, answer the quick check, and apply the evidence at three checkpoints. Retry feedback supports review; results are not a secure test or gradebook.

Use for teacher-led review, science centers or partner practice. Independent readers may need support with the vocabulary below. The design target is grades 3-5; choose support based on the learner.

## Vocabulary and concepts to discuss

Living and nonliving parts; populations; communities; interactions

## Open Balance Base - direct lesson link

Scan the QR code or use the clickable link. This guide is usable offline; the adventure runs on an external educational website.



# Parts of an Ecosystem - key ideas

## 1. The first clues

An ecosystem includes living organisms, nonliving conditions and their interactions. Water, air, sunlight and soil matter alongside plants and animals.

## 2. How the clues connect

A population is a group of the same kind of organism in an area. A community includes the different living populations there.

## 3. Our evidence record

Our pond map connects plants to light and water, and grazers to plants as food. The nonliving parts support important links even though they are not alive.

## Keep the science accurate

Use a manageable system and one change at a time. No population equations or molecular nutrient cycling.

## Apply the evidence

Use a specific observation from this lesson to explain one choice. Point to a clue, then connect that clue to a scientific idea.

Curriculum reference: <https://www.nextgenscience.org/pe/5-Is2-1-ecosystems-interactions-energy-and-dynamics>

# Talk through the evidence

## 1. Which belongs in an ecosystem model?

Expected answer: Living and nonliving parts

Reasoning: An ecosystem includes living organisms, nonliving conditions and their interactions. Water, air, sunlight and soil matter alongside plants and animals.

## 2. What is a population here?

Expected answer: The same kind of frog in the pond

Reasoning: A population is a group of the same kind of organism in an area. A community includes the different living populations there.

## 3. What does the community include?

Expected answer: Different living populations

Reasoning: A population is a group of the same kind of organism in an area. A community includes the different living populations there.

## 4. Which connection is supported?

Expected answer: Plants depend on light and water

Reasoning: An ecosystem includes living organisms, nonliving conditions and their interactions. Water, air, sunlight and soil matter alongside plants and animals.

## Guide the discussion

Ask learners to name the evidence that supports their answer. If an answer differs, revisit the matching key idea on page 2 and invite a revised explanation.

Online rewards: this lesson grants one fixed digital Expedition Discovery. Five saved digital Gemling friends become available only after all six distinct subject lessons are complete, in any order. Digital rewards do not establish physical ownership.