

Study planner, Biology Year 9

Example College · term 2, school year 2026-2027 · unit 4: Ecology · teachers: Ms De Boer (9A, 9B) and Mr Yilmaz (9C)

What this unit is about

In this unit you learn how plants, animals and their surroundings depend on each other. We start at the school pond and Example Wood behind the school, and end with the question of what people do with ecosystems: the wood, the farm next door, the cycle path the council wants to build.

Learning objectives

By the end of this unit you can:

1. explain the terms individual, population, community and ecosystem and illustrate each with an example;
2. explain the difference between biotic and abiotic factors and give three examples of each;
3. draw a food chain and a food web and point out producers, consumers and decomposers in them;
4. explain why a food chain rarely has more than four or five links;
5. describe the carbon cycle in outline and name the role of photosynthesis and respiration in it;
6. explain what carrying capacity is and which factors influence the size of a population;
7. explain what biodiversity is and why it matters;
8. give an opinion on a human intervention in an ecosystem, with arguments from this unit.

Schedule

Week	Lesson	Topic	Homework for the next lesson
1	1 and 2	Section 1: What is ecology? Fieldwork at the school pond	Read booklet section 1, tasks 1 and 2
2	3 and 4	Section 2: Food chains and food webs	Tasks 3, 4 and 5; open resource on food webs, part 1 (Test your knowledge)
3	5 and 6	Section 3: Cycles	Tasks 6 and 7; learn the glossary up to section 3
4	7 and 8	Section 4: Populations and balance. Practical: counting water fleas	Tasks 8 and 9, hand in the practical report

Week	Lesson	Topic	Homework for the next lesson
5	9 and 10	Section 5: People and ecosystems. Debate on Example Wood	Tasks 10, 11 and 12
6	11	Revision and practice test	Learn everything for the test
6	12	Unit 4 test	

The test

- **When:** Thursday 12 November 2026, in your own lesson.
- **What:** the whole booklet (sections 1 to 5), the glossary and tasks 1 to 12. The practical report counts separately.
- **How:** 25 questions, 15 multiple choice and 10 open questions. Open questions earn marks for the reasoning, not only the answer. There is always one question in which you draw or complete a food web.
- **Weighting:** the test counts twice, the practical report once.
- **Aids:** none. The drawings of the food webs are given with the questions.

How to study this unit

- Do not learn the terms as loose words; learn them with an example from the school pond or Example Wood. The test almost always asks for an example.
- Do the tasks yourself before looking at the answers. The tasks resemble the test questions.
- Draw. You remember food webs and cycles better once you have drawn them yourself.
- Stuck? Ask in the lesson, or come to the support session: Tuesday, period 8, room B12, no sign-up needed.

Extra practice material

Alongside the booklet we use an open educational resource on food chains and food webs with a Creative Commons licence (for example a chapter from OpenStax Biology 2e, CC BY 4.0). It is free to use at home; it contains short explanations, animations and a self-test.

Rules and agreements

- Homework goes in your exercise book; photos of someone else's book do not count.
- If you were ill, you catch up on the practical during the support session. Tell your teacher yourself within two school days of returning.
- **AI tools:** you may use an AI helper to ask for explanations and to quiz yourself. You may not use it to produce the answers to the tasks; the tasks exist so that you learn to reason yourself, and the test asks exactly that.
- Questions outside the lesson: email biology@examplecollege.example. You get an answer within two school days. For personal matters, go to your form tutor.