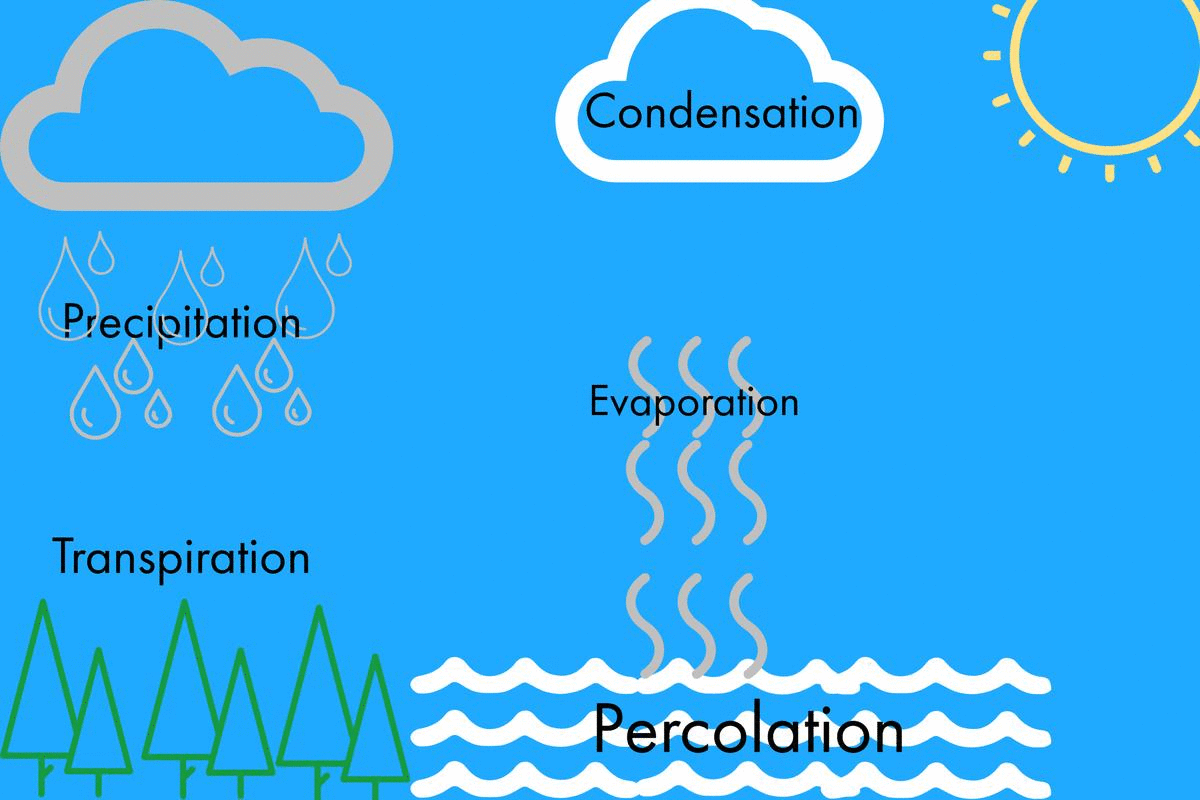
Ecology Succession & Population Growth

****

****

**See** [**https://www.learningctronline.com/courses**](https://www.learningctronline.com/courses) **for Materials and Resources.**

**Topics:**

1. Ecology

**Objectives:**

1. Explain how energy and nutrients flow through an ecosystem (biogeochemical cycles).
2. Describe the five major types of interactions between organisms.
3. Identify community ecological interactions, including competition, predation, and symbiosis.
4. Define and explain ecological succession from pioneer species to climax communities and world biomes.
5. Understand population ecology, survivorship, and growth.
6. *Define ecology and levels of organization within an individual and outside the organism.*
7. *Identify two major variables that affect all organisms.*
8. *Understand interactions in an ecosystem.* 
   1. *Distinguish habitat from niche.*
   2. *Food chains, food webs, food pyramids*
   3. *Food relationships, cycles of materials in nature*
9. *Explain how energy flows between trophic levels of a food chain (pyramid).*
10. *Describe how energy supply limits the length of food chains*

TAKE NOTE

1. Notes/Study Guide
2. Homework from Text
3. Population Growth Virtual Lab
4. HONORS or Bonus 🡪 Sampling Activity Fish Management
5. HONORS 🡪 Study guide for test (objectives, major points, minor points)
6. Test Ecology
7. Week 29 Devotional (<https://www.learningctronline.com/devotional>)

**Text**: Chapter 34: Ecology pp. 708 – 732

Read the assigned pages in the text.

**Class Notes: PowerPoint or PDF**

**Notes/Study Guide:** Fill in the Study Guide worksheet to understand the class notes.

**Homework**:

* Study Questions (end of the chapter 34 in the text) #2, 7-8, 11, 15-16 (explain true/false)
* Use a Word document format as follows:
  + Heading: Your name, Chapter in Text, Study Questions
  + Number the appropriate questions you are to answer
  + Write the answer in a complete sentence use the question as the template (do not copy the question, but reword it into a statement that answers the question).
* Use the same document each week by starting a new “Study Question” for a different chapter on the next page.
* Assignments will be “spot checked” during class or submitted via email.

**Lab**: Population Growth Virtual Lab

* Complete the "Population Growth Virtual" lab using the lab worksheet provided.
* If the website URL does not work, use the video: <http://somup.com/c3lVr0wF6T> (4:56).
* After completing the Lab worksheet, email it to [learningctronline@gmail.com](mailto:learningctronline@gmail.com) for grading.
* Save document into your LAB folder in the Biology folder on your desktop.

**TEST:** Ecology

1) the academic integrity policy

* Tests must be completed **WITHOUT** referring to books, notes, the internet, people, or any outside resources.
* A guardian should be proctoring the test as per Learning CTR Online policy: <https://www.learningctronline.com/test-proctor-policy>

2) This test is composed of 30 multiple choice and 2 essay questions. There is opportunity for bonus points as well.

* The **test must be taken "in one sitting"**, meaning that once you start the test, you must complete it without interruption.
* Take a short break (5 minutes) during the test.

3) There is a **60-minute time limit** on this test. Please have the proctor write the time taken at the top of your answer sheet with their signature or initials.

4) Honors students have an additional 20 minutes to answer the additional questions.

5) Proctors should NOT be reading the test or engaging students during the test.

5) Do NOT use RED font. Black font is best.

Supplemental Resources (Optional)

1. World Biome Antarctica PPT
2. Sampling Activity Fish Management (BONUS)
3. Ecology Review Worksheet
4. Polar Bear Game (BONUS)
5. Vocabulary Review (Crossword) Ecology Succession & Growth
6. Tracking Populations (Tags & Bands) PPT

<https://youtu.be/rNjPI84sApQ> (6:49) The Amoeba Sisters Channel – Ecological Relationship   
  
<https://youtu.be/NHqEthRCqQ4> (7:55) The Amoeba Sisters Channel – Carbon & Nitrogen Cycles   
  
<https://youtu.be/uqEUzgVAF6g> (6:23) The Amoeba Sisters Channel – Ecological Succession: Nature’s Great Grit

<https://youtu.be/TZk6vcmLcKw> (6:38) The Amoeba Sisters Channel – Biomagnification & the Trouble with Toxins