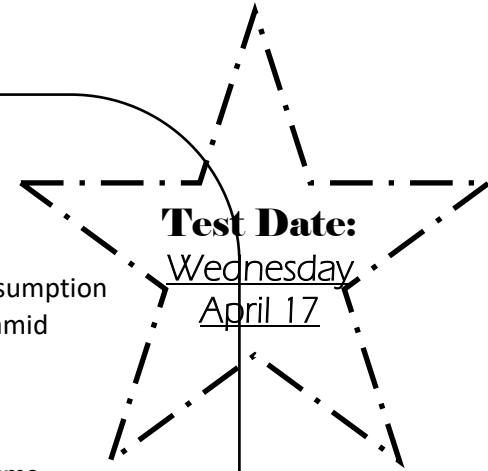


# Ecology Systems Unit 12



## I CAN -

- 1. identify the levels of organization in an ecosystem.
- 2. identify the different trophic levels and roles in the ecosystem of an organism based on their energy consumption
- 3. trace the flow of energy and matter in an ecosystem through a food chain, food web, and ecological pyramid
- 4. calculate the amount of energy available to organisms in an ecosystem.
- 5. interpret and trace the flow of matter through the carbon cycle and nitrogen cycle.
- 6. predict possible outcomes of disruptions in food webs, carbon cycle, and nitrogen cycle.
- 7. identify the type of symbiotic relationships (mutualism, commensalism, parasitism) between two organisms
- 8. describe how competition of resources can affect organisms.
- 9. describe how predation affects the relationship between organisms.
- 10. discuss how changes in abiotic and biotic factors can affect populations and communities.
- 11. predict how a change in a biotic or abiotic factor factor can alter an ecosystem.
- 12. explain the importance of biodiversity in the sustainability of an ecosystem.
- 13. identify the difference between primary and secondary succession.
- 14. sequence ecological succession when given different examples.
- 15. explain how succession affects species diversity.
- 16. identify adaptations that are well-suited to ecosystems.



## WORDS TO KNOW

- |                     |                      |                 |                        |  |
|---------------------|----------------------|-----------------|------------------------|--|
| 1. Ecosystem        | 2. Community         | 3. Population   | 4. Producer/autotroph  | 5. Primary/secondary/tertiary Consumer |
| 6. Decomposer       | 7. Trophic level     | 8. Symbiosis    | 9. Mutualism           | 10. Commensalism                       |
| 11. Parasitism      | 12. Predation        | 13. Competition | 14. Primary succession | 15. Secondary succession               |
| 16. Pioneer species | 17. Climax community | 18. Abiotic     | 19. Biotic             | 20. Carrying capacity                  |

# Calendar

Monday 4/1	Tuesday 4/2	Wednesday 4/3	Thursday 4/4	Friday 4/5
Plants, Body Systems and Viruses Review	Plants, Body Systems and Viruses Exam	<p style="text-align: center;"><b>Late Arrival</b> ☺ ☺ ☺ ☺ ☺ ☺</p> <p><b>Topic:</b> Ecology <b>Activities:</b> Test Analysis Unit 11 Pre-Assessment for Ecology <b>Unit Plan and Expectation Sheet</b></p>	<p><b>Topic:</b> Energy Flow <b>Activities:</b> Pyramid notes/ 10% rule Bioaccumulation Energy Transfer <b>By the end of the period I can:</b> 2, 3, 4, 6</p> <p style="text-align: center;"><b>XTD 3rd</b></p>	<p><b>Topic:</b> Energy Flow <b>Activities:</b> Energy Flow activities/ Trophic levels with Food Webs and impacts <b>By the end of the period I can:</b> 2, 3, 4, 6</p>
Monday 4/8	Tuesday 4/9	Wednesday 4/10	Thursday 4/11	Friday 4/12
<p><b>Topic:</b> Cycles <b>Activities:</b> Nitrogen and Carbon games <b>By the end of the period I can:</b> 5, 6, 11</p>	<b>ELA I STAAR</b>	<p><b>Topic:</b> Relationships <b>Activities:</b> Symbiosis matching Ecological Relationships <b>Topic:</b> Populations <b>Activities:</b> Density Dependent/ Independent/ Carrying Capacity <b>By the end of the period I can:</b> 7, 8, 9, 10, 11, 12</p>	<p><b>Topic:</b> Populations <b>Activities:</b> Density Dependent/ Independent/ Carrying Capacity <b>Topic: Succession</b> <b>Activities:</b> Simulations Levels of organization <b>By the end of the period I can:</b> 7, 8, 9, 10, 11, 12, 13, 14, 15, 16</p>	<p><b>Topic: Succession</b> <b>Activities:</b> Simulations Levels of organization Human Impact Scenarios <b>By the end of the period I can:</b> 12, 13, 14, 15, 16</p>
Monday 4/15	Tuesday 4/16	Wednesday 4/17	Thursday 4/18	Friday 4/19
<p><b>Topic:</b> Ecology Review <b>Activities:</b> Break Out Review <b>By the end of the period I can:</b> 1-16</p>	<p><b>Topic:</b> Review <b>Activities:</b> Review <b>By the end of the period I can:</b> 1-16</p>	<p>.....</p> <p>Ecology Exam</p> <p>.....</p>	<p><b>XTD 3rd</b></p> <p><b>STAAR PREPARATION</b></p>	<p><b>STAAR PREPARATION</b></p>

\*\*\*\* This is a tentative calendar and subject to change.