**Weekly Homework Assignments Fall 2017:**

Each week you are expected to complete readings, work on presentations, and/or write a short answer response of an article read for discussion with the class. Listed below are the weekly assignments. This page will also be posted on my website in case you lose this one. It is your responsibility to know what the assignments are each week and to complete them!

**Online Resources:**

CK-12 has a **free** textbook that we will be using this school year. Most readings are short and come with additional videos, quizzes and more. You may be required to take notes on terms.

<http://www.ck12.org/biology/>

**Readings and Homework:**

September 15 –

Readings: *Introduction to Biology*

[Goals of Science](http://www.ck12.org/biology/Goals-of-Science/)

[Scientific Perspectives](http://www.ck12.org/biology/Scientific-Perspectives/)

[Scientific Methods – Advanced](http://www.ck12.org/biology/Scientific-Methods/lesson/Scientific-Methods-Advanced/?referrer=featured_content) \*take notes on TERMS listed at end of reading

[Scientific Reasoning – Advanced](http://www.ck12.org/biology/Scientific-Thinking/lesson/Scientific-Reasoning-Advanced/?referrer=concept_details)

[Scientific Investigation](http://www.ck12.org/biology/Scientific-Investigation/)

[Science Experiments](http://www.ck12.org/biology/Science-Experiments/lesson/Science-Experiments/?referrer=concept_details) \*take notes on VOCABULARY at end of reading

[Scientific Theories](http://www.ck12.org/biology/Scientific-Theories/)

[Scientific Models in Biology](http://www.ck12.org/biology/Scientific-Models-in-Biology/)

[What is a Scientist?](http://www.ck12.org/biology/What-is-a-Scientist/)

[Units of Measurement](http://www.ck12.org/biology/Units-of-Measurement-in-Biology/)

HW: work on presentation DUE: September 22!

September 22 –

Readings: *Ecology*

[Ecosystems](http://www.ck12.org/biology/Ecosystems/)

[Flow of Energy](http://www.ck12.org/biology/Flow-of-Energy/)

[Producers](http://www.ck12.org/biology/Producers/)

[Food Chains & Food Webs](http://www.ck12.org/biology/Food-Chains-and-Food-Webs/)

[Trophic Levels](http://www.ck12.org/biology/Trophic-Levels/)

[Biogeochemical Cycles](http://www.ck12.org/biology/Biogeochemical-Cycles/)

[Water Cycle](http://www.ck12.org/biology/Water-Cycle/)

[Carbon Cycle](http://www.ck12.org/biology/Carbon-Cycle/)

[Nitrogen Cycle](http://www.ck12.org/biology/Nitrogen-Cycle/)

HW: work on presentation

September 29 –

Reading: National Geographic Article: [*The Bug That’s Eating the Woods*](http://ngm.nationalgeographic.com/2015/04/pine-beetles/rosner-text) April 2015

\*Write a short response to the article. Include your thoughts on how the ecosystem has changed and will change in the future. Describe what the western forests may look like 50 to 100 years from now. How have other species besides trees been effected by the pine beetles?

\*\*Be sure to check out the diagrams and photographs on the left-hand side of the article.

HW: work on presentation \*Presentations will be given at the next class meeting on October 6th! Be prepared to present that day!

October 6 –

Readings: *Ecology*

[Terrestrial Biomes](http://www.ck12.org/biology/Terrestrial-Biomes/)

[Climate Effects on Biomes](http://www.ck12.org/biology/Climate-Effects-on-Biomes/)

[Climate and Plant Growth](http://www.ck12.org/biology/Climate-and-Plant-Growth/)

[Classification of Biomes](http://www.ck12.org/biology/Classification-of-Biomes/)

[Arctic and Subarctic Biomes](http://www.ck12.org/biology/Arctic-and-Subarctic-Biomes/)

[Temperate Biomes](http://www.ck12.org/biology/Temperate-Biomes/)

[Tropical Biomes](http://www.ck12.org/biology/Tropical-Biomes/)

[Aquatic Biomes](http://www.ck12.org/biology/Aquatic-Biomes/)

[Freshwater and Wetland Biomes](http://www.ck12.org/biology/Freshwater-and-Wetlands-Biomes/)

[Aquatic Organisms](http://www.ck12.org/biology/Aquatic-Organisms/)

October 13 –

Readings: *Ecology*

[Predation](http://www.ck12.org/biology/Predation/)

[Competition](http://www.ck12.org/biology/Competition/)

[Symbiosis](http://www.ck12.org/biology/Symbiosis/)

[Succession](http://www.ck12.org/biology/Succession/)

[Biodiversity](http://www.ck12.org/biology/Biodiversity/)

[Global Climate Change](http://www.ck12.org/biology/Global-Climate-Change/)

HW: Write a short essay (at least 3 paragraphs) on how Minnesota biomes would be altered by climate change. Use terms from our notes and the readings.

October 20 –

Reading: National Geographic Article: [*Mighty Mites*](http://ngm.nationalgeographic.com/2015/02/mites/dunn-text) February 2015

HW: Write a short answer response to the *Mighty Mites* article. Describe one mite and its niche.

HW: Research one of the following ecological relationships for discussion*\**:

Goldenrod & Goldenrod Fly

Cowbird & Warbler

Algae & Fungus

Ants & Aphids

Mussels & Fish

Goldenrod Fly & Wasp

*\*to be given to you in class*

October 27 –

Readings: *Plants*

[Plant Classification](http://www.ck12.org/biology/Plant-Classification/)

[Importance of Plants](http://www.ck12.org/biology/Importance-of-Plants/)

[Early Evolution of Plants](http://www.ck12.org/biology/Early-Evolution-of-Plants/)

[Nonvascular Plants](http://www.ck12.org/biology/Nonvascular-Plants/)

[Vascular Plants](http://www.ck12.org/biology/Vascular-Plants/)

[Seed Plants](http://www.ck12.org/biology/Seed-Plants/)

[Flowering Plants](http://www.ck12.org/biology/Flowering-Plants/)

[Flowering Plant Tissues](http://www.ck12.org/biology/Flowering-Plant-Tissues/)

[Structures of Flowering Plants](http://www.ck12.org/biology/Structures-of-Flowering-Plants/)

[Fertilization of Flowering Plants](http://www.ck12.org/biology/Fertilization-of-Flowering-Plants/)

HW: Define the following TERMS from the readings:

Nonvascular, Vascular, Xylem, Phloem, Spermatophytes, Gymnosperm, Angiosperm, Bryophyte, Tracheophyte

Describe the similarities and differences between:

Moss and Clubmoss

Seeds of Gymnosperms and Angiosperms

November 3 –

Readings: *Plants*

[Plant Growth](http://www.ck12.org/biology/Plant-Growth/)

[Roots](http://www.ck12.org/biology/Roots/)

[Stems](http://www.ck12.org/biology/Stems/)

[Leaves](http://www.ck12.org/biology/Leaves/)

[Plant Life Cycles](http://www.ck12.org/biology/Plant-Life-Cycles/)

HW: Diagram the following in your notes in color:

Life Cycle of Nonvascular Plants

Life Cycle of Seedless Vascular Plants

Gymnosperm Life Cycle

Angiosperm Life Cycle

Define the following TERMS from the readings:

Meristem, Apical Meristem, Primary Meristem, Secondary Meristem, Vascular Cambium, Cork Cambium, Fibrous Root System, Root Cap, Root Hairs, Taproot System, Deciduous Plants, Evergreen Plants, Chlorophyll, Photosynthesis, Antheridia, Sporophyte, Zygote, Frond, Sporangia, Gametophyte, Pollen, Fruit

**Open Note QUIZ next class!!!**

November 10 –

Readings: *Animals*

[Animal Classification](http://www.ck12.org/biology/Animal-Classification/)

[Invertebrate Characteristics](http://www.ck12.org/biology/Invertebrate-Characteristics/)

[Invertebrate Classification](http://www.ck12.org/biology/Invertebrate-Classification/)

HW: Answer Review Questions at the end of each reading section

November 17 –

Readings: *Animals*

[Chordates](http://www.ck12.org/biology/Chordates/)

[Invertebrate Chordates](http://www.ck12.org/biology/Invertebrate-Chordates/)

[Vertebrate Characteristics](http://www.ck12.org/biology/Vertebrate-Characteristics/)

[Vertebrate Classification](http://www.ck12.org/biology/Vertebrate-Classification/)

HW: Answer the Review Questions at the end of each reading section

HW: Research either one Invertebrate of one Vertebrate for presentation ***DUE: December 8***

November 24th – THANKSGIVING BREAK

December 1 –

HW: Work on Presentations. DUE: DECEMBER 8

December 8 -

NO HOMEWORK!!!

See you in January!