

Agenda for Friday, January 8th 2015

Agenda	Homework
1. Reviewing Daphnia Results 2. Daphnia and Evolution 3. Animal Adaptations	- IBI Lesson 9 Reflection (and corrections) due in Schoology by Wednesday, 1/13 at 8am.

Which NGSS practices, DCIs, and CCs are we meeting?

Science and Engineering Practices

- Analyzing and interpreting data.
- Engaging in argument from evidence.
- Obtain, evaluate, and communicate information.

Crosscutting Concepts

- Cause and Effect
- Stability and Change

Disciplinary Core Ideas

- LS2.A: Interdependent relationships exist within ecosystems.
- LS4.B: Natural selection leads to the predominance of certain traits in a population, and the suppression of others.
- LS4.C: Adaptations occur by natural selection acting over generations. Traits that support successful survival and reproduction in the new environment become more common.

Why are we doing this?

On Friday we attempted to measure the heart rate of the *Daphnia*. While almost all groups obtained the resting heart rate, many were unable to successfully complete all trials for adding caffeine and alcohol to the *Daphnia*. The reason for adding these substances was to see how the *Daphnia* would respond to stimuli, a characteristic of life. Today we examine the results and review our conclusion (use the CEA format). Then, we will read how *Daphnia* provided evidence of evolution. A component of evolution is understanding adaptations. As we are working with *Daphnia*, which is an animal, we will look at animal adaptations. However, it is important to know all life is adapted for its environment, not just animals.

Today's Procedure

Part 1: Reviewing Daphnia Results.

1. Open IBI Handout 29. Have your conclusion visible.
2. Place your iPad on your table, face up, and leave it alone. Mr. Ower will check your assignment for completion.
3. Begin reading pp. 106-109 in the IBI textbook.
4. Let's examine the data and reach our conclusion. What is our claim we can make from the data? What evidence do we have to support our claim? What is our reasoning for reaching our claim?

Part 2: Daphnia and Evolution

1. Complete the reading on pp. 106-109 in the IBI textbook.
2. Download IBI Handout 30 from 7bscience.com and complete all questions.
3. Be prepared to share your responses with the class.

Part 3: Animal Adaptations

1. Download IBI Handout 31 from 7bscience.com.
2. Complete the definitions and examples as provided by Mr. Ower.
3. Read the instructions on IBI Handout 31 before answering the questions. Use the links on 7bscience.com to find the answers to each of the questions.