



Week #7 - Science - Virtual Learning
Mrs. Jones

Science for ALL Junior High grades for the week of May 4th - May 8th

Welcome to week #7 of virtual learning! I'm sure that none of us ever thought that we would be entering May quite like this. Please keep the graduates of 2020 in your thoughts and prayers. I can tell you first hand that it's been tough to watch Josh lose everything that he has worked so hard to achieve. While it's difficult to begin a new journey when the one we were on didn't quite end the way we envisioned, it is also an opportunity for learning and growth. During this time, lean on your families and loved ones, write your new adventure together and look forward with hope, faith and the knowledge that God's love is all around us. Be safe my kiddos. I miss you!

Virtual Hugs,
Mrs. Jones

We will be finishing this year with chapter 4.2 in Discovery Education - Relationships Among Organisms. Please make sure that you read this letter in its entirety for assignments, summaries and tidbits of wisdom. :)

Assignment #1:

This assignment is due during our ZOOM meeting on Tuesday, May 5th at your classes normally scheduled time. The code for the ZOOM meeting has not changed.

During the meeting please have the following prepared and ready to discuss with the class.

**^^ For the assignment I would like you to find the coolest, oddest, wacka doodlest (“yes, now I’m making words up while in quarantine” ... Hee Hee), funniest etc. relationship within an ecosystem. You may choose to use a predator-prey relationship, a symbiotic mutualistic relationship, a commensalistic relationship or a parasitic relationship. Please do your research and find the relationship within ANY ecosystem that you find interesting. You will be sharing your findings with the class. Please include:

1. Why did you choose this relationship?
2. What type of a relationship is it?
3. What ecosystem did you choose?
4. A brief explanation of the relationship? In other words what is the relationship (benefits or downfalls)?
5. What is the effect on both parties in the relationship?

The following definitions should help. *** As you know, organisms within an ecosystem have relationships with individuals of their own species, individuals from other species and non-living resources. A group of different species living within an ecosystem is called a community. Relationships within an ecosystem can be grouped into different types of interactions. They are:

1. **Predator - Prey relationships** - An animal that hunts and eats other animals is called a predator. The animal that gets eaten is called a prey animal. Predator-prey relationships involve both adaptations of the predator to catch the prey and adaptations of the prey to avoid the predator. Population sizes are also connected to this relationship. When a prey population changes, the predator population also changes. Ex: Wolf and deer populations
2. **Symbiotic relationships** - Symbiosis is any type of a close and long-term biological interaction between two different biological organisms, be it mutualistic, commensalistic, or parasitic (parasite/host).
 - A. **Symbiotic Mutualism** - 2 organisms benefit each other. Ex: ClownFish and the Sea Anemone

- B. **Commensalism** - refers to a relationship in which one organism benefits and the other organism is not significantly affected. Ex: cattle and birds called cattle egrets
- C. **Parasitic** (parasite/host) - 1 organism benefits at the expense of the other organism. Usually, the host organism is not killed by the parasite. Ex: Deer (host) and a tick (parasite) that attaches themselves to the deer.

Assignment #2:

Please watch the video The Web of Life: Producer to Predator (23:52) in Discovery Education AND take the Quiz. I will be assigning both the quiz and the video to you in Discovery Education. ** I should be able to see your quiz score online. However, if you can email me a picture that would be great! ** This assignment is due on Friday, May 8th by 3pm.

Assignment #3:

Read Explore 1, 2 and 3 in chapter 4.2 Relationships Among Organisms then summarize using 15 - 25 bullet points. Remember, bullet points do not need to be full paragraphs or sentences. It can be as simple as saying: Symbiosis - a close, long term interaction between 2 organisms within an ecosystem

** This assignment is due on Friday, May 8th by 3pm.

Below is a summary of chapter 4. 2:

- How do different organisms in a community obtain energy from their environment?

Answer: Photosynthetic organisms such as plants obtain energy directly from the sun. They are called producers. Herbivores are organisms that take in that energy by eating plants and other photosynthetic organisms. Herbivores are considered primary consumers. Carnivores are organisms that take in energy by eating animals. Carnivores can be secondary and tertiary consumers. Omnivores are animals that eat both plants and animals. Decomposers get energy from dead plants and animals and other organic matter.

- What kinds of relationships exist between organisms in a community?

Answer: Relationships in a community can be cooperative or competitive. Predator/prey relationships and parasite/host relationships are competitive relationships. In a predator/prey relationship, a predator hunts prey for food. In a parasite/host relationship, a parasitic organism feeds on a living host organism in order to survive. Sometimes this kills the host organism. Symbiosis is a kind of cooperative relationship. In symbiotic relationships, organisms work together to obtain energy from their environment, grow, and reproduce.

- Why is the sun an important source of energy for all living things?

Answer: The sun continuously supplies energy into nearly every ecosystem on Earth. Producers store this energy in matter. Energy and matter are transferred from producers to consumers, from consumers to other consumers and to decomposers, and from decomposers to other organisms, in a cycle. In this cycle, matter and energy are conserved. However, much energy is lost into the environment every time an energy transfer between organisms occurs. Energy that is released into the environment can no longer be used by living things. Without the sun, there would be no way to replace energy released into the environment.

Summary of assignments and due dates:

1. Tuesday, May 5th - During our Zoom meeting: Relationship assignment
2. Friday, May 8th - Watch the video [The Web of Life](#) (23:52) AND take the assigned quiz in DE
3. Friday, May 8th - 15-25 bullet points on the chapter Relationships Among Organisms in Discovery Education

Stay safe, stay healthy!

Mrs. Jones