Cycle 1: Connections Weeks 10 & 11

**NATURAL WORLD STUDY GUIDE**

**Guiding Question:** How do structure and function vary among organisms in different domains and kingdoms?

**Chapter 9 Section 3 & 4 pages 334-349**

**Overview: “Protists” and “Fungi”**

The protist kingdom is very diverse. All protists are eukaryotes that cannot be classified as animals, plants, or fungi. All live in moist surroundings. Most are unicellular, but some are multi-cellular. Some are heterotrophs, some are autotrophs, and some are both. Protists can be divided into three categories: animal-like, plant-like, and fungus-like protists.

Like animals, animal-like protists are heterotrophs, and most are able to move from place to place to obtain food. Plant-like protists are called algae. Algae vary greatly in cell organization, structure, and function. Some algae are unicellular, while other algae are multi-cellular with differentiated tissues and organs. Like fungi, fungus-like protists are heterotrophs, have cell walls, and use spores to reproduce. Spores are tiny cells that are able to grow into new organisms.

Most fungi share several important characteristics: Fungi are eukaryotes that have cell walls, are heterotrophs that feed by absorbing their food, and use spores to reproduce. They vary in size from unicellular yeasts to multicellular mushrooms. Fungi are heterotrophs, but they do not take food into their bodies in the way that animals do. Fungi usually reproduce by making spores. The lightweight spores are surrounded by a protective covering and can be carried easily through air or water to new sites. Fungi produce spores in reproductive structures called fruiting bodies. Three major groups of fungi include sac fungi, club fungi, and zygote fungi.

Many fungi provide foods for people. Fungi play important roles as decomposers and recyclers on Earth. Some fungi cause disease while others fight disease.

**OCTOBER 22ND - NOVEMBER 2ND**

**Guided Lessons**

1. _____ Read, mark-up, and discuss the overview and class work assignments on Monday, October 22nd.

2. _____ Participate in the lesson, “Three Domains & Six Kingdoms”. Complete the graphic organizer and paste it in your SNB on Tuesday, October 23rd.

3. _____ Participate in the lesson, “Ode Poems”. Secure the lesson and example in your SNB for reference on Tuesday, October 23rd.

4. _____ Participate in the lesson on “Protists”. Complete the graphic organizer and paste it in your SNB on Thursday, October 25th.

5. _____ Get your science classwork checked by the teacher and work on your ode poem final draft on Friday, October 26th. You will also receive a Chapter 9 Section 3 & 4 Science Quiz Key to study for the Trimester 1 Final Exam on this day.

6. _____ Participate in the museum sharing of your ode poem final draft on Monday, October 29th. You must come prepared with your typed, printed, and illustrated polished draft at the beginning of class!

7. _____ Participate in the final exam review activity in class on Tuesday, October 30th in preparation for the Trimester 1 final exam on Thursday, November 1st - Friday, November 2nd.

8. _____ Respond to the “Focus Questions” completely in your SNB as directed by Ms. Sara.

**Independent Work**

9. _____ Read pages 334-349 in Focus on California Life Science. You may record additional notes in your SNB or on your notetaking guide, but no extra credit will be awarded. Remember, textbook pages and handouts are posted on Ms. Sara’s Google Classroom page.
10. _____ Complete the Chapter 9 Section 3 & 4 Notetaking Guide, “Protists” and “Fungi” as you read pages 334–349. Record your answers on the 6-page worksheet provided as completely as possible and tape it in your SNB.

11. _____ Record the following Chapter 9 Section 3 & 4 vocabulary words and definitions in your SNB.
   1. algae 6. fungi 11. protozoan
   2. budding 7. hyphae 12. pseudopod
   3. cilia 8. lichen 13. spore
   4. contractile vacuole 9. mutualism 14. symbiosis
   5. fruiting body 10. protist

12. _____ Writing in Science: An Ode to Cells, Bacteria, Viruses, Protists, or Fungi (20 points)
   a) _____ Rough Draft. In your SNB, write your ode poem rough draft. Be sure to include as much figurative language throughout your poem as possible! Completed poems must be a minimum of 1-page in length. After you have completed your rough draft, complete the peer editing worksheet. Secure completed peer editing worksheets on the page opposite or behind your rough draft. Refer to the lesson on “Ode Poems” if you need help getting started. (10 points)
   b) _____ Final/Polished Draft. Your final draft must be typed, printed, and hand-illustrated to be shared with your homeroom group at the beginning of class on Monday, October 29th. Be sure to include a title and your name on your polished draft. DO NOT SECURE YOUR FINAL DRAFT IN YOUR SNB! Keep it as a loose page for our museum sharing and parent “Share with Me” at the beginning of Trimester 2. See Ms. Sara’s examples from past students to see the illustration expectations and completed odes for inspiration. (10 points)

13. _____ Correct your Chapter 9 Section 1 & 2 Quiz, get it signed by a parent/guardian and turn it in to your homeroom turn-in tray by Friday, October 26th.

14. _____ Have your agenda open so a teacher can check your agenda planner for calendared classwork assignments and a parent/guardian signature on Friday, October 26th.

15. _____ Complete the Trimester 1 final exam Thursday, November 1st – Friday, November 2nd. You may use your SNB as a resource.

Get all assignments checked off by Ms. Sara and color your graph by Friday, November 2nd!

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**ADVANCED WORK STUDENTS**

- Come to the benchmark meetings at lunch as outlined in your packet ready to share your ideas, progress, successes/challenges and timeline with the group. Bring any evidence of your work, such as pictures or research, to share with the group.
- Be prepared to present your project to the homeroom groups on Friday, November 2nd and complete the self-assessment in your packet.