**BIOLOGY 2022-23 March 22, 2023**

**Today’s Agenda (Day 130)**

1. HOUSEKEEPING ITEMS

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1. Homework Check:

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1. Class Activity:

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🡪DAY 3: Chapter 18 PPT Review

1. **Section 18.1 – Bacteria**
2. **Section 18.2 – Viruses and Prions**

🡪MONDAY: BEGIN: Chapter 19 PPT Review

1. Section 19.1 - Introduction to Protists
2. Section 19.2 – Protozoans – Animal-like Protists
3. Section 19.3 – Algae – Plantlike Protists
4. Section 19.4 – Funguslike Protists

HOMEWORK:

* READ: Chapter 18 – Bacteria and Viruses
* READ: Chapter 19 - Protists
* COMPLETE:
* **STUDY**: Chapter 18 Test

REMINDERS:

* **TEST: Ch 18 🡪 March 23**
* **QUIZ: Ch 19 & 20 Vocabulary🡪 April 4**
* **TEST: Ch 19 🡪 March 30**
* **TEST: Ch 20 🡪April 6**
* **TEST: Ch 30 - 31 🡪April 13**
* **QUIZ: Ch 32 Vocabulary🡪 April 18**
* **TEST: Ch 32 🡪April 20**
* **TEST: Ch 33 🡪May 4**
* **QUIZ: Ch 33 & 34 Vocabulary🡪 May 9**
* **TEST: Ch 34 🡪May 11**
* **QUIZ: Ch 35 Vocabulary🡪 May 23**
* **TEST: Ch 35 🡪May 25**
* **QUIZ: Ch 36 Vocabulary🡪 May 30**
* **TEST: Ch 36 🡪June 1**

Chapter 19 - Protists

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| Acrasin | Alternation of generations | Bioluminescent | Colony | Contractile vacuole | Microsporidium |
| Pellicle | Plasmodium | Protozoan | Pseudopod | Test | trichocyst |

Chapter 20 - Fungi

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| Ascocarp | Ascospore | Ascus | Basidiocarp | Basidiospore | Basidium |
| Bioindicator | Chitin | Conidiophore | Fruiting body | Gametangium | Haustorium |
| Hypha | Lichen | Mycelium | Mycorrhiza | Rhizoid | Septum |
| Sporangium | Spore | Stolon |  |  |  |

**BIOLOGY 2022-23 READING GUIDE**

**CH 18 Bacteria & Viruses Reading Guide**

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| 1. Describe what scientists think the first organisms on Earth were like.
2. Why are prokaryotes now divided into two domains?  What are the two domains?
3. Describe the importance of bacteria to humans.
4. Where do Archae live?  What is another name for Archae?
5. Compare and contrast bacteria and Archae.
6. Compare and contrast thermoacidophiles and halophiles.
7. What are methanogens?  Where do they live?
8. **Using** the picture below, describe the function of all of the labeled structures.

Diagram  Description automatically generated1. List and describe the three general shapes of prokaryotes.
2. How do Gram-positive bacteria look when they are stained?  Why do they look this way?
3. How do Gram-negative bacteria look when they are stained?  Why do they look this way?
4. Describe two different ways that prokaryotes move.
5. Compare and contrast binary fission and conjugation as reproductive methods for prokaryotes.
6. **What** process is shown in the figure below?

Diagram  Description automatically generated1. Describe the difference between obligate anaerobes and facultative anaerobes.
2. Describe how each of the following types of prokaryotes obtain food: heterotrophs, photoautotrophs, and chemoautotrophs.
3. How do endospores help bacteria survive?
4. Why is nitrogen fixation essential for life on Earth?
5. List three types of food that are all made with the help of bacteria.
6. Describe two different ways bacteria can cause disease.
7. What is a virus?
8. Describe a theory on how viruses evolved.
9. **Describe** the general structure of a virus (be sure to include the definition of capsid in your answer).
10. How do viruses infect hosts cells?
11. Compare and contrast the lytic cycle and the lysogenic cycle in viruses.
12. What is a retrovirus?
13. What are prions?  Name two diseases caused by prions.
14. **What** type of viruses are illustrated below?  How do you know?

 Diagram, radar chart  Description automatically generatedA picture containing text, indoor, table  Description automatically generated |

**BIOLOGY 2022-23 READING GUIDE**

**Chapter 19 Reading Guide**

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| Review pages 542 – 565 in the Glencoe Science *Biology*Textbookand answer the following questions.1. How are protists classified?  What is the one trait all protists share?
2. List and describe the three different methods protists use to obtain nutrition.
3. Describe a typical habitat for a protist.

4. How do ciliophora move?5. Describe the structure of a paramecia. (Include all vocabulary on page 547)1. Compare and contrast binary fission and conjugation as forms of reproduction for ciliates.
2. Describe the structure of an amoeba.
3. What do amoebas use cysts for?
4. Describe three characteristics shared by all sporozoans.
5. List and describe a disease caused by sporozoans that are members of the genus *Plasmodium*.
6. Describe common traits shared by zooflagellates.
7. Why are algae considered to be plant-like?
8. What are diatoms?  How do they reproduce?
9. What does bioluminescent mean?  Name a bioluminescent insect (it isn’t in the book).
10. What are red tides?  Why are red tides potentially so dangerous?
11. Compare and contrast brown algae and green algae.
12. List and describe three uses of algae.
13. Describe what is meant by alternation of generations (be sure to include haploid and diploid in your answer).
14. Describe common characteristics shared by slime molds.
15. Compare and contrast acellular slime molds and cellular slime molds.
16. What impact has downy mildew had on the history of the United States?
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**BIOLOGY 2022-23 READING GUIDE**

**Chapter 20 Reading Guide**

1. Describe characteristics shared by all fungi.  How many species of fungi are known today?
2. Compare and contrast multicellular fungi and unicellular fungi.
3. Describe two ways the physical structure of a fungi differs from that of a plant.
4. Compare and contrast the two types of hyphae shown below.



1. Compare and contrast saprophytic fungi and mutualistic fungi.  Give one example of each type.
2. What is a fairy ring?  Why do fairy rings form?
3. List and describe three different methods fungi use to reproduce.
4. Describe three different adaptations fungi use for survival.
5. What is illustrated in the diagram below?



1. Describe the life cycle of the common mold shown below.



1. Describe the life cycle of sac fungi.
2. Describe the life cycle of club fungi.
3. What is mutualism?  Give an example.
4. What is a lichen?
5. How do lichens survive a severe drought?
6. What is a bioindicator?  Why are lichens considered to be bioindicators?
7. Describe two examples of beneficial fungi.
8. What role does fungi play in food production for humans?
9. What is bioremediation?  How are fungi useful in terms of bioremediation?
10. Describe two examples of harmful fungi.