

## Biology Chapter 20: Homework

### Hmwrk 20-1

1. What is a protist?
2. What does *Protista* mean in Greek?
3. According to Lynn Margulis, where did the first protists come from?
4. Many biologists think that protists need to be classified into separate kingdoms. What is one way to classify protists?

### Hmwrk 20-2

1. What are zooflagellates?
2. What are sarcodines? Define pseudopods.
3. What are trichocysts?
4. What is the difference between macronucleus and micronucleus?
5. What are sporozoans?
6. What is malaria? Describe how a person is infected.

### Hmwrk 20-3

1. What are accessory pigments and how do they differ from chlorophyll?
2. What are euglenophytes? Describe their structure.
3. What are diatoms? Describe their shape.
4. What are dinoflagellates? Describe a unique property of some.
5. What is phytoplankton and what is their importance?

### Hmwrk 20-4

1. What are the differences between red algae and brown algae?
2. What are the three types of green algae? What are their similarities and differences?
3. What is alternation of generations?
4. What is the difference between gametophytes and sporophytes? What do they produce?
5. Name two uses of algae by humans.

### Hmwrk 20-5

1. What is the difference between cellular slime molds and acellular slime molds?
2. What is another term for water molds and what are they?
3. What are the two different structures that are produced on the hyphae of water molds during sexual and asexual reproduction?
4. What organism caused the Irish Potato Famine and why it's an important historical event?

## Biology Chapter 20: Study Guide

### Section 1

- Vocabulary

protist

- Know what a protist is and why protists do not fit into any other kingdom
- Know what *Protista* means in Greek
- Know how protists might have evolved (Margulis)
- Know one approach to reclassifying protists

### Section 2

- Vocabulary

Pseudopod

Trichocyst

Anal pore

Amoeboid movement

Macronucleus

Contractile vacuole

Food vacuole

Micronucleus

Conjugation

Cilium

Gullet

- Know what zooflagellates are, their mode of food consumption, their habitat, and their reproduction methods
- Know what sarcodines are, their mode of food consumption, their habitat, and their reproduction methods
- Know what ciliates are, how they got that name, their mode of food consumption, their habitat, and their reproduction methods
- Know the internal anatomy of a paramecium
- Know what sporozoans are, their mode of food consumption, their habitat, and their reproduction methods
- Know what malaria, African Sleeping Sickness, and amebic dysentery and what they are caused by, how you can contract the disease, and what the symptoms are
- Be able to describe the cycle of infection of malaria
- Know some beneficial animal-like protists that form symbiotic relationships

### Section 3

- Vocabulary

Accessory pigment

Pellicle

Eyespot

Phytoplankton

- Know what key traits are used to classify algae
- Know the different forms of chlorophyll and why they are needed
- Know what accessory pigments are and what they allow algae to do
- Know what euglenophytes are, their structure and their habitat
- Know what chrysophytes are and their structure
- Know what diatoms are and their structure
- Know what dinoflagellates are, their structure and some unique properties
- Know the ecological roles that plantlike protists play

### Section 4

- Vocabulary

Phycobilin  
Filament

Alternation of generation  
Gametophyte

Spore  
Sporophyte

- Know the differences and similarities between red, brown and green algae including structure, habitat, and importance
- Know the differences and similarities between the three types of green algae
- Know the reproduction methods of green algae in general
- Know the reproduction methods of *chlamydomonas* and *Ulva*
- Know the difference between gametophytes and sporophytes and what they produce
- Know some of the human uses of algae

## Section 5

- Vocabulary

Cellular slime mold  
Acellular slime mold  
Fruiting body

Plasmodium  
Hypha  
Zoosporangium

Antheridium  
Oogonium

- Know what slime molds are, their habitat, their structure and their two groups
- Know the differences and similarities between cellular slime molds and acellular slime molds
- Know what water molds are, another name for them, their structure, and their reproduction methods
- Know the structures that are produced on the hyphae of slime molds during sexual and asexual reproduction
- Know why slime molds and water molds are important in the environment
- Know what the Irish Potato Famine was, what caused it and what its importance is