

Module 3 Study Guide

1. A. Pseudopods-a temporary foot like extension of a cell used for locomotion or engulfing food.
  - b. nucleus- the region of a eukaryotic cell which contains the cells main DNA.
  - c. vacuole- a membrane bound SAC within a cell.
  - d. Ectoplasm- a thin watery cytoplasm near the plasma membrane of some cells
  - e. endoplasm-a dense cytoplasm found in the interior of many cells.
  - f. Flagellate-a protozoan that propels itself with its flagellum.
  - g. pellicle-a firm flexible coating outside the plasma membrane.
  - h. Chloroplast-an organelle containing chlorophyll for photosynthesis.
  - i. chlorophyll-a pigment necessary for photosynthesis.
  - j. eyespot-a light sensitive region in some protozoa.
  - k. Symbiosis-a relationship between two species where at least one benefits.
  - l. Mutualism-a relationship between two or more organisms of different species where all benefit from the association.
  - m. Commensalism- our relationship between two organisms of different species where one is benefited and the other is neither harmed nor benefited.
  - n. parasitism- a relationship between 2 organisms of different species where one is benefitted and the other is harmed.
  - o. cilia- hair-like projections that extend from the plasma membrane and are used for locomotion.
  - p. spore- a reproductive cell with a hard protective coating.
  - q. plankton- tiny organisms that float in the water.
  - r. zooplankton- tiny floating organisms that are either small animals or protozoa.
  - s. Phytoplankton - tiny floating photosynthetic organisms primarily eleyg
  - t. thallus- the body of a plant like Organism that is not divided into leaves roots or stems.
  - u. Cellulose- a substance made of sugars that is common in the cell walls of many organisms.
  - v. Hold fast- a special structure used by an Organism to anchor itself.
  - w. Sessile colony- a colony that uses a holdfast to anchor itself to an object.

2. Figure 3.1

subKingdom protozoa-sarcodina, mastigophora, sporozoan, ciliophoran

subKingdom algae- chlorophyta, chrysophyta, pyrrophyta, Phaeophyta, rhodophyta

3. Euglena and spirogyra

4. Contractile vacuole pumps water out of the cell. Food vacuoles are involved in digestion and contractile vacuoles are involved in osmoregulation.

5. Ectoplasm is thin and watery the endoplasm is dense.

6. euglena uses flagella to move and amoeba use pseudopods
7. Trypanosoma brucei, T. cruzi, Toxoplasma gondii
8. Sarcodina- pseudopods, mastigophora- flagellum, ciliophoran- cilia
9. Spores, have no means of locomotion
10. Parasitism, mutualism
11. They require a large amount of energy to live
12. Paramecia conjugation results in a mutual exchange of DNA.
13. The second group
14. They use photosynthesis
15. chlorophyta
16. food vacuole-ingest food particles, sarcodina
  - Contractile vacuole- pump water out of the cell, sarcodina
  - Flagellum-enables movement, mastigophora
  - Pellicle-provide stability and flexibility, mastigophora
  - Chloroplast- produce energy through photosynthesis , Chlorophyta
  - Eyespot-react to changes in light, mastigophora
  - Cilia-movement and feeding, ciliophora
  - Nucleus- storing the cells dna, ciliophora
  - Oral groove-guide food particles and to the cell, ciliophoran
17. Diatomaceous earth. Filtering liquids toothpaste
18. When certain dinoflagellates are in bloom
19. phylum phaeophyta and rhodophyta
20. algin