**IB BIOLOGY STUDY GUIDE**

**ORIGINS OF EUKARYOTES/PROTISTS**

**VOCABULARY 1**

prokaryote conjugation phycoerythrin CaCO3

eukaryote macronucleus diatomaceous

micronucleus earth fucoxanthin

endomembrane system pseudopod carotenoids protozoa

endosymbiosis cilia chlorophyll algae

flagella chitin absorptive

phagocytosis plankton silica protists

cellulose *archaezoans*

**VOCABULARY 2**

**(*Details* about these groups will be on the lab test, but you should be able to recognize the following groups of protists and be able to *generally* describe them.)**

golden algae

radiolarians ciliates euglenoids

*Entamoeba*  green algae

*Plasmodium* dinoflagellates

amoebas *Trypanosoma* diatoms

foraminifera cellular slime mold red algae

plasmodial slime mold brown algae

apicomplexans

**Laboratory Test**

For each protist you saw in the lab, be able to:

1. Identify the group to which it belongs.
2. Define its *specific* nutritional style
   1. chemoheterotrophs that are animal-like (free-living or parasitic?)
   2. photoautotrophic protists
   3. chemoheterotrophs that are absorptive
3. Point out any important features of each group, and give details about them
   1. Does it have a shell? What is the shell made of?
   2. Does it have; pseudopods? cilia? flagella? Where are they located on the organism?
   3. Does it have distinctive nuclei that you can identify, or any other distinctive structures that you can name? What do these structures do?
   4. For algae, what are the predominant photosynthetic pigments?
4. Describe any impact on humans
   1. Does it provide any resource or product that we use?
   2. Does it have any impact on human health?
   3. Does it have any mutualistic relationships that are important?