# **KINGDOM- PROTISTA**

**SINGLE CELLED EUKARYOTES- HAVE MEMBRANE BOUND ORGANELLES WITH A TRUE NUCLEUS**

**AUTOTROPHS- MAKE OWN FOOD**

**PHOTOTROPHIC AUTOTROPHS**

**CHEMOTROPHIC AUTOTROPHS**

**HETEROTROPHS- GET FOOD FROM A DIFFERENT SOURCE**

**GROUPS OF PROTISTS**

**1. CILIATES- CILIA FOR MOVEMENT**

**EXAMPLE- *PARAMECIUM* HYPERLINK "http://www.infovisual.info/02/004\_en.html" http://www.infovisual.info/02/004\_en.html**

***PARAMECIUM*: large ciliate protozoan that lives in stagnant freshwater.**

**HYPERLINK "http://www.youtube.com/watch?v=fmwN\_mD7TvY&feature=related" http://www.youtube.com/watch?v=fmwN\_mD7TvY&feature=related**

**Cilia: hairlike structures that cover the paramecium and are used for locomotion.**

**Contractile vacuole: cavity of the paramecium that is able to contract and expel water.**

**Food vacuole: cavity of the paramecium responsible for digestion (primitive form of a stomach).**

**Micronucleus: one of the less important central organelles of a paramecium that controls *reproduction*.**

**Oral groove: canal of the paramecium used to ingest nutrients (similar to your mouth).**

**Gullet: cavity of the pharynx (similar to your throat).**

**Ectoplasm: outermost cytoplasm layer of a paramecium.**

**Endoplasm: innermost cytoplasm of a *Paramecium*.**

**Macro-nucleus: the most important central organelle of a *Paramecium* that controls body functions (brain-like).**

**Canals of contractive vacuole: division of the contractile cavity of a *Paramecium* carries waste water out of cell.**

**Trichocyst: Hair-like stinging structure found on certain ciliates and flagellates that is used for protection and capturing food.**

**2. FLAGELLATES- USE FLAGELLA FOR MOVEMENT**

**HYPERLINK "http://www.youtube.com/watch?v=QGAm6hMysTA&feature=related" http://www.youtube.com/watch?v=QGAm6hMysTA&feature=related**

**1 OR 2 PER ORGANISM**

**EXAMPLE: *EUGLENA* HYPERLINK "http://www.infovisual.info/02/001\_en.html" http://www.infovis**

**ual.info/02/001\_en.html**

**HYPERLINK "http://www.youtube.com/watch?v=l9ymaSzcsdY" http://www.youtube.com/watch?v=l9ymaSzcsdY**

**Structure of a *Euglena*: flagellate freshwater protozoan. It is composed of chlorophyll and has a rudimentary eye.**

**Reservoir: part of a *Euglena* used for storage.**

**Nucleus: central organelle of a *Euglena*. Controls cell function.**

**Contractile vacuole: cavity of the *Euglena* that is able to contract. Stores and eliminates waste water.**

**Pellicle: membrane that envelopes a *Euglena*.**

**Chloroplast: organelle of the *Euglena* responsible for photosynthesis. Contains chlorophyll.**

**Nucleolus: spherical body that contains the nucleus of a *Euglena*.**

**Stigma: light-sensitive part of a *Euglena* used to detect light.**

**Flagellum: long, mobile filament used by the *Euglena* for locomotion.**

**3. SARCODINES- USE PSEUDOPODS FOR MOVEMENT**

**EXAMPLE: *AMEOBA* HYPERLINK "http://www.infovisual.info/02/003\_en.html" http://www.infovisual.info/02/003\_en.html**

**Structure of an amoeba: unicellular animal with pseudopods that lives in fresh or saltwater.**

**Pseudopodium: part of the amoeba used for locomotion.**

**Ectoplasm: cytoplasm found near the cell membrane of an amoeba.  
Endoplasm: central part of cytoplasm of an amoeba.**

***Cytoplasmic Streaming*- Movement by the flow of cytoplasm HYPERLINK "http://www.youtube.com/watch?v=zTFsn9xt7b0&feature=related" http://www.youtube.com/watch?v=zTFsn9xt7b0&feature=related**

**Cell membrane: membrane covering an amoeba.  
Contractile vacuole: cavity of the amoeba that is able to contract.  
Food vacuole: cavity of the amoeba responsible for food storage.  
Nucleus: central organelle for an amoeba.  
Digestive vacuole: cavity of the amoeba responsible for digestion.**

**ENDOCYTOSIS- MOVEMENT OF MATERIALS INTO A CELL**

**HYPERLINK "http://www.youtube.com/watch?v=W6rnhiMxtKU&feature=related" http://www.youtube.com/watch?v=W6rnhiMxtKU&feature=related**

**EXOCYTOSIS- MOVEMENT OF MATERIALS OUT OF A CELL**

**PHAGOCYTOSIS- BRINGING FOOD INTO CELL**

**HYPERLINK "http://www.youtube.com/watch?v=UqB36I2OqPU&feature=related" http://www.youtube.com/watch?v=UqB36I2OqPU&feature=related**

**PHYLUM SPOROZOA**

**1. PARASITIC- need host**

**2. DISEASE CAUSING**

**3. NON-MOTILE- can’t move**

**4. PRODUCE SPORES FOR REPRODUCTION IN HOST**

**HYPERLINK "http://www.youtube.com/watch?v=IVbq2yQH52g" http://www.youtube.com/watch?v=IVbq2yQH52g**

**\*300 MILLION PEOPLE WITH MALARIA - 3 MIL. WILL DIE**

**\*4 SPECIES OF MALARIA**

**\*1000 CASES PER YEAR IN U.S.**

**\*BROUGHT TO U.S. BY EUROPEAN SETTLERS**

***PLASMODIUM-*CAUSES MALARIA(pg 388)**

**1. MOSQUITO BITES HUMAN, SALIVA TRANSFERRED INTO BLOODSTREAM.**

**2. SPORES TRAVEL TO LIVER**

**3. LIVER CELLS BURST, INFECTING OTHER RED BLOOD CELLS WITH NEW *PLASMODIUM***

**4. RED BLOOD CELLS BURST, INFECTING OTHER RED BLOOD CELLS**

**CHLOROQUININE- USED TO KILL *PLASMODIUM***

**OTHER SPOROZOAN DISEASES**

**AMOEBIC DYSENTARY- *ENTAMOEBA*-**

**1. LIVE IN INTESTINES, CAUSE BLEEDING**

**2. PASSED OUT IN FECES- INFECT WATER /FOOD**

***TRICHONYMPHA*- IN TERMITE GUT TO BREAK DOWN CELLULOSE IN WOOD**

***TRYPANOSOMA-* AFRICAN SLEEPING SICKNESS**

**1. TRANSMITTED BY TSETSE FLY**

**2. GETS INTO BLOOD AND DESTROYS NERVOUS SYSTEM- LEADS TO FATAL SLEEP**

***GIARDIA*: FOUND IN WATER, CAUSES SEVERE DIARRHEA**

**CAN GET IT THROUGH ACCIDENTAL SWALLOWING OF “RECREATIONAL WATER”**