

20-1 The Kingdom Protista

1. “Protista” means “the very first”. Protists are the firsts what?

_____ Eukaryotic organisms _____

2. Mitochondria and chloroplasts may be descended from what?

From aerobic and photosynthetic prokaryotes that were engulfed by larger cells and began to live inside it (endosymbiosis).

3. One way protists are classified is by how they obtain nutrition. For each groups, indicate their way to obtain nutrition:

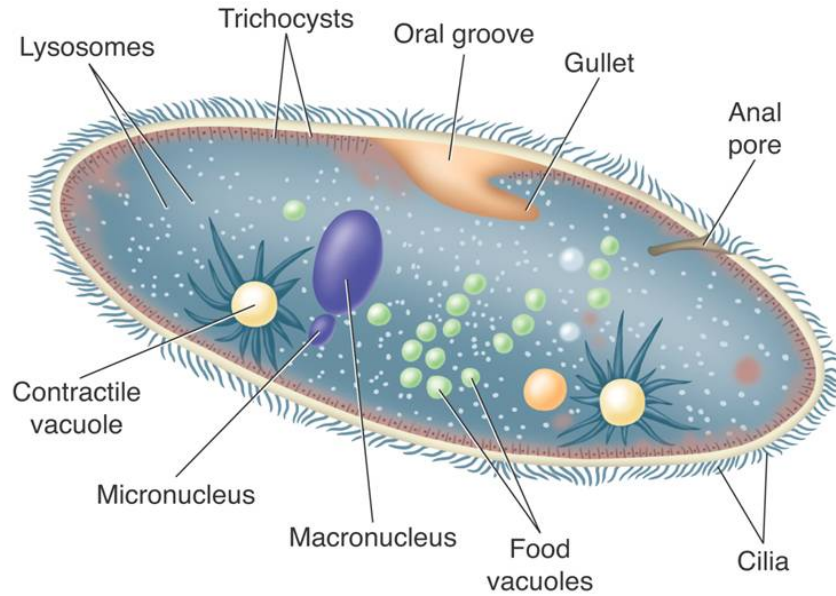
- a) Animal-like protists: ___Heterotrophs___
- b) Plantlike protists: ___Photosynthesizers___
- c) Funguslike protists: ___decomposers and paratistes___

20-2 Animal-like Protists: Protozoans

4. Complete the table. Name the four phyla of animal-like protists, give their means of movement, feeding, reproduction, environments where they live and give an example of a species (or group) for each phylum.

Phyla:	<u>Zooflagellates</u>	<u>Sarcodines</u>	<u>Ciliates</u>	<u>Sporozoans</u>
Movement:	<u>Flagella</u>	<u>Pseudopods</u>	<u>Cilia</u>	<u>no movement</u>
Feeding:	<u>absorb food through their cell membranes</u>	<u>Engulfing with pseudopods Use of food vacuoles</u>	<u>Cilia, gullet, food vacuoles, lysosomes, anal pore</u>	<u>parasites</u>
Reproduction:	<u>Binary fission sexual reprod.</u>	<u>Mitosis and cytokinesis</u>	<u>Binary fission Conjugation</u>	<u>spores, hosts</u>
Environment	<u>lakes, streams, parasites</u>	<u>ocean, fresh water</u>	<u>Fresh water Sea water</u>	<u>In hosts</u>
Species ex.	<u><i>Giardia</i> <i>Trichomonas</i> <i>Trichonumpha</i></u>	<u><i>Amoeba</i> Foraminiferans Radiolarians Heliozoans <i>Entamoeba</i></u>	<u><i>Paramecium</i> <i>Euplote</i> <i>Stentor</i></u>	<u><i>Plasmodium</i> <i>Trypanosoma</i></u>

5. Identify the pointed structures of the paramecium.



6. Complete the sentences:

Plasmodium is a protist from the phylum of **Sporozoon** and causes the disease of **malaria**. The mosquito that carries *Plasmodium* is called **anopheles**.

7. Indicate the cell stages of *Plasmodium* across its life cycle in its two hosts.

