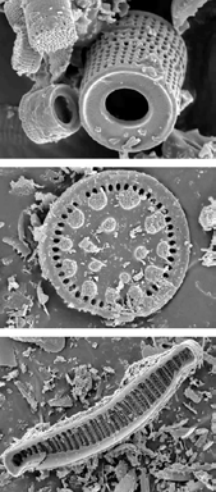
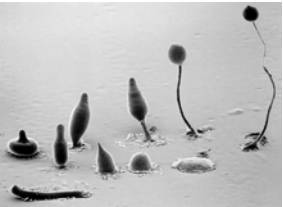
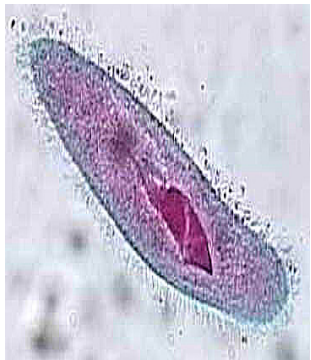

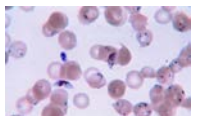
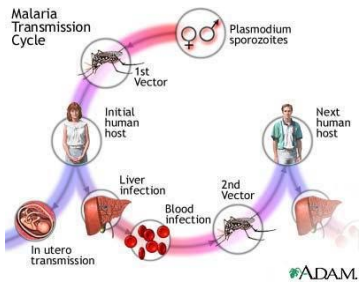


<p>Class Notes <i>Kingdom Protista</i></p> <p>Main Idea:</p>	<p>Name: _____ Period: _____ Date: _____ Notes:</p>
<p>What is a protist?</p>	<ul style="list-style-type: none"> • Kingdom Protista is a dumping ground for organisms that don't fit into any other Eukarya kingdoms <ul style="list-style-type: none"> ○ Eukaryotes ○ Unicellular or colonial ○ Lots of different life styles ○ Live in most environments ○ Categorized by how they get their nutrition (e.g., autotroph, heterotroph)
<p>Autotrophic Protists</p> 	<ul style="list-style-type: none"> • Algae (singular: alga) • Photosynthetic <ul style="list-style-type: none"> ○ Produce most of the oxygen in the atmosphere! • No roots, stems, or leaves • 4 phyla: <ul style="list-style-type: none"> ○ Euglenophytes (no cell wall; can be heterotroph in low light) ○ Diatoms (patterned silica shells) ○ Dinoflagellates (cause of red tides and bioluminescence; some are heterotrophs) ○ Red, Brown, Green algae <ul style="list-style-type: none"> ▪ Green algae were <u>likely ancestral plants</u>
<p>Fungus-like Heterotrophic Protists</p> 	<ul style="list-style-type: none"> • Saprotrophs (feed on dead organisms or live as plant parasites) • Unlike fungi, they can move! • 3 phyla: <ul style="list-style-type: none"> ○ Cellular Slime Molds ○ Plasmodium Slime Molds (the runny looking ones) ○ Water Molds
<p>Animal-like Heterotrophic Protists</p>	<ul style="list-style-type: none"> • Proto = first; zoa = animal (singular: Protozoan, plural: protozoa) • Unicellular • Heterotrophs • 4 phyla (mostly grouped based on method of movement) <ul style="list-style-type: none"> ○ Ciliates ○ Flagellates ○ Amoeboids ○ Sporozoans

<p>Animal-like Heterotrophic Protists</p> <p>➤ Ciliates and flagellates</p> 	<ul style="list-style-type: none"> • Ciliates <ul style="list-style-type: none"> ○ Use cilia for movement ○ Not parasitic ○ Example: <i>Paramecium</i> • Flagellates <ul style="list-style-type: none"> ○ Use flagella for movement ○ Some parasitic, e.g.,... <ul style="list-style-type: none"> ▪ <i>Trypanosoma</i> (African sleeping sickness) ▪ <i>Giardia lamblia</i> ○ Some mutualistic, e.g.,... <ul style="list-style-type: none"> ▪ <i>Trichonympha</i> (help termites digest wood)
<p>Animal-like Heterotrophic Protists</p> <p>➤ Amoeboids</p> 	<ul style="list-style-type: none"> • Move via pseudopod ("false foot") <ul style="list-style-type: none"> ○ <u>Pseudopods</u>: Cytoplasm-filled projections • Engulfs food by flowing around it • Examples <ul style="list-style-type: none"> ○ <i>Entamoeba histolytica</i> (amoebic dysentery) ○ Foraminifera (CaCO₃ shell) ○ <i>Amoeba</i>
<p>Animal-like Heterotrophic Protists</p> <p>➤ Sporozoans</p> 	<ul style="list-style-type: none"> • Sporozoans • Parasitic; live inside a host • Cannot move on their own • Examples: <i>Plasmodium falciparum</i> (malaria), <i>Toxoplasma gondii</i> (toxoplasmosis)
<p>What is malaria?</p> 	<p>➤ Caused by <i>Plasmodium falciparum</i>, passed from human to human by infected mosquitoes</p> <ul style="list-style-type: none"> ○ Parasites travels through bloodstream to liver, where they mature and enter the bloodstream and infect red blood cells ○ Parasites multiply inside the red blood cells, which then break open within 48 to 72 hours, infecting more red blood cells. ○ Symptoms – anemia, headache, jaundice, muscle pain, nausea, sweating, vomiting, bloody stools, chills, coma, convulsion, fever ○ About 2 million cases per year, about 1 million deaths (mostly children); 91% in Africa
<p>Summary:</p>	