Classification Review Part II | Protists & Fungi

Protists

• Fill in the following:

1. Animal-like protists are also called: Protozoans
   a. What are two examples of animal-like protists:
      i. Amoeba, Euglena, Stentor,
      ii. Paramecium, Trypanosoma, Vorticella
   b. How do they get energy/food? Heterotrophic (Consume other organisms)
   c. Animal-like protists are (circle choice): Single-celled Multicellular
   d. Label the following protozoans with the structure they use to move:

   e. List the two common diseases protozoans cause: Malaria (Plasmodium), Sleeping sickness (Tyrpanosoma), & Intestinal disease (Giardia)
   f. How are these diseases passed to humans? By vectors: Mosquitoes & Tsetse fly.

2. Plant-like protists
   a. How do they get energy/food? Autotrophs (Photosynthesis)
   b. Plant-like protists can be (circle choice): Single-celled Multi-cellular Live in Colonies
   c. What three characteristics of plants do they lack:
      i. Stems
      ii. Leaves
      iii. Roots

3. Fungus-like protists
   a. How do they get energy/food? Heterotrophic decomposers (absorb dead organic matter)
   b. Fungus-like protists are (circle choice): Single-celled Multicellular
   c. Why were fungus-like protists moved out of kingdom fungi? Fungus-like protists were moved out of kingdom fungi because they can move during part of their life cycle.
   d. What was the cause of the Great Potato Famine in Ireland? Water molds which are a fungus like protist.
4. Protists are more closely related to (circle one): Animals Bacteria  
   a. Why? **They are eukaryotic.**

5. Animal, plant, and fungus-like protists are all combined into the kingdom protista.  
   Are these organisms considered closely related? No  
   a. What type of evidence do scientists have to support this conclusion? **Molecular Evidence**  
   b. What will likely happen to Kingdom Protista in the future? **Kingdom protista will likely be split into 15 or more kingdoms.**

### Fungi

6. Fill in the chart:

<table>
<thead>
<tr>
<th>Fungi Categories</th>
<th>Picture of Fungi</th>
<th>Details/Description/Example</th>
<th>Reproductive Feature with Picture</th>
</tr>
</thead>
</table>
| **Primitive Fungi** | ![X](X) | • Small  
  • Simple  
  • Spores has flagella | ![X](X) |
| **Sac Fungi** | ![Sac Fungi](Sac Fungi) | • Form a sac called an ascus that contains spores  
  • Morals  
  • Truffles  
  • Yeast | Acsi |
| **Bread Mold** | ![Bread Mold](Bread Mold) | Mold on food and used to ferment certain foods. Also the type of fungi involved in mycorrhizae. | Zygospore |
| **Club Fungi** | ![Club Fungi](Club Fungi) | • Club shaped  
  • Mushrooms  
  • Puffballs  
  • Shelf fungi | Basidia |
7. Place the following steps of fungi reproduction in order from first step #1 to last step #5:

__1__ Spores land on the ground

__4__ Diploid fruiting body grows from the mass of mycelium

__2__ Mycelium from 2 fungi grow underground

__5__ Haploid spores are created by meiosis from the fruiting body

__3__ The 2 mycelium fuse and grow together

8. At one point scientists classified fungi as plants. Complete the diagram below by bulleting the similarities and differences of plants and fungi.

<table>
<thead>
<tr>
<th>Differences: Plants</th>
<th>Similarities of Plants &amp; Fungi</th>
<th>Differences: Fungi</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Contain chlorophyll</td>
<td>• Grow below and above ground</td>
<td>• Heterotrophic</td>
</tr>
<tr>
<td>• Photosynthesize</td>
<td>• Eukaryotes</td>
<td>• Decomposers -- absorb food from environment</td>
</tr>
<tr>
<td>• Have true roots, leaves, and stems.</td>
<td>• Some produce spores</td>
<td>• Cell walls are made out of chitin</td>
</tr>
<tr>
<td>• Cell walls are made out of cellulose</td>
<td>• Non-moving</td>
<td></td>
</tr>
</tbody>
</table>

Additional notes and or questions:

STUDY!