1) Organelles carry out specific processes involving chemical reactions. In the chart below, identify two organelles and, for each, identify a process involving chemical reactions that occurs there. Describe one specific way each process identified is important to the functioning of the organism.

<table>
<thead>
<tr>
<th>Organelle</th>
<th>Process involving chemical reactions that occurs in the organelle</th>
<th>Function</th>
<th>How the process is important to the functioning of the organism</th>
</tr>
</thead>
<tbody>
<tr>
<td>mitochondria</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>chloroplast</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ribosome</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>lysosome</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2) Identify each as Archaea, Eubacteria, or Protista
   A) An example is E. coli
   B) Bears a true nucleus
   C) Prokaryotic
   D) Found in hot springs

3) Identify each as carbohydrate hydrolysis, protein hydrolysis, or lipid hydrolysis
   A) occurs first
   B) occurs second
   C) occurs third
   D) requires HCl
   E) requires amylase
   F) requires bile
   G) first occurs in the stomach
   H) first occurs in the mouth