Introduction to the Kingdom Fungi
Are Fungi eukaryotes or prokaryotes?

Where are Fungi found (habitat)?

What size are fungi?

Why are fungi vital for life on Earth?

What is a mycologist?

List the basic characteristics of all Fungi here:

To which other eukaryotic Kingdom are Fungi more closely related?

Fungal Structure
Describe features of Fungal cell wall:

Define the three structures that make up most Fungi. Sketch a picture of each.

<table>
<thead>
<tr>
<th>Structure</th>
<th>Definition/Explanation</th>
<th>Sketch</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hyphae</td>
<td></td>
<td></td>
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<tr>
<td>Mycelium</td>
<td></td>
<td></td>
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<tr>
<td>Fruiting body</td>
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</tbody>
</table>

Fungal Nutrition

Do fungi have chloroplasts?

For each of the four modes of nutrition mentioned, jot down a few notes/examples.
Mode of Nutrition | Explanation | Examples:
--- | --- | ---
Decomposer/Saprobe
Parasite/Pathogen
Symbioses
Predators

**Fungal Reproduction**
List the 3 ways in which Fungi sexually reproduce:
1. 
2. 
3. 

All sexual reproduction in Fungi involves __________.

**Fungal Life Cycle**
Annotate the diagram below to describe a Fungus’ life from spore to fruiting body:
Classification of Fungi
Complete the table below to organize your thoughts from reading about the taxonomic groups of Fungi:

<table>
<thead>
<tr>
<th>Division (Phylum)</th>
<th>Examples</th>
<th>General Features</th>
<th>Sexual structures unique to this Division</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zygomycota</td>
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<td></td>
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<tr>
<td>Ascomycota</td>
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<td>Basidiomycota</td>
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<tr>
<td>Deuteromycota</td>
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</tbody>
</table>

What is a Lichen?
Describe at least one way in which lichens are important ecologically:

Beneficial Fungi
Give an example of how the Fungi are beneficial in each of the following areas:
- Economically -
- Medically -
- Ecologically -

Harmful Fungi
Give an example of how the Fungi are harmful in each of the following ways:
- Economically -
- Medically -
- Ecologically -