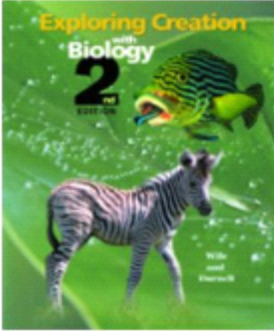



M04 Labs

Tuesday, July 07, 2009
9:41 AM

VoiceThread	http://voicethread.com/share/228223/
Cmap	http://cmapspublic2.ihmc.us/rid=1210771614201_1059278962_31593/Kingdom%20Fungi.cmap

Slide	Notes
 <p>Module 04: Kingdom Fungi</p> <p>Lecture 1: General Discussion of Fungi Lecture 2: Clasification in Kingdom Fungi</p> <p> Lab Day Interactive Practice</p>	
<p>Experiment 4.1 Class Basidiomycetes</p>	
<p>Object: To observe the fungi that are readily found in most areas and to understand how members of class Basidiomycetes grow and reproduce.</p>	

Here is what you will need

mushrooms and puffballs



magnifying
glass

microscope



slides, coverslips



needle

Stage 1: Collect the Mushrooms

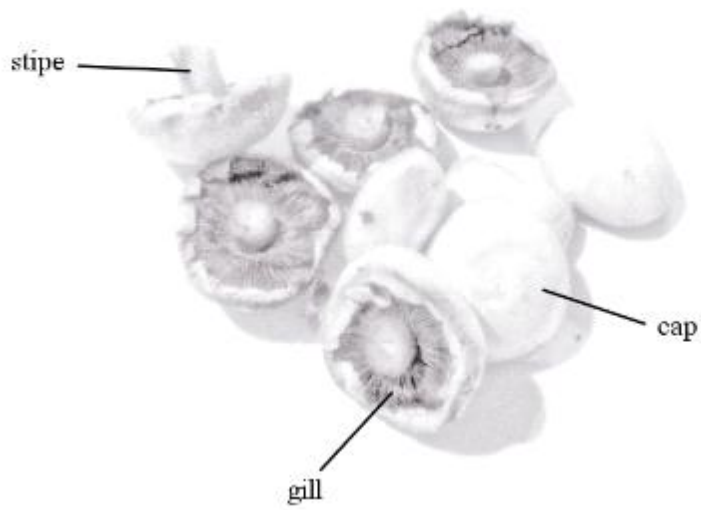
Go for a walk and look for mushrooms, puffballs, and shelf fungi.



Experienced mushroom collectors suggest making notes of what plants and mushrooms are nearby. Take photos and make notes of exactly where you collected your specimen(s).

Gross, External Anatomy:

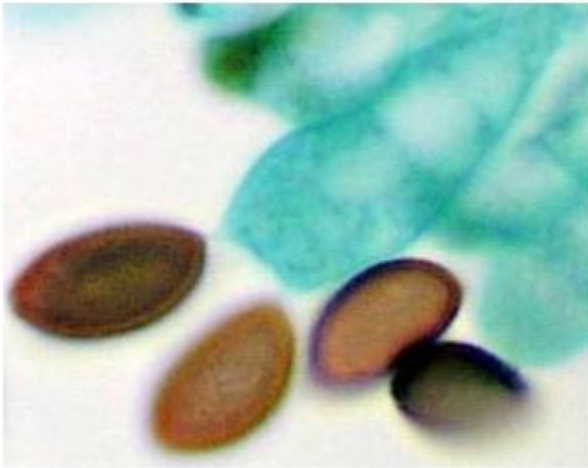
Observe and sketch or photograph specimens collected. Label the stipe, cap, and gill.



Hand lens inspection of the gills.



Microscopic inspection of the basidiospores.



Most store bough mushrooms will have long since lost all their spores. If you can, try to get fresh ones from your yard or nearby wooded area.



With labs such as this one, the object is to observe. It is qualitative rather than quantitative.

You can use photos, text, or sketches to describe what you do and see.

Experiment 4.2 Yeast and the Fermentation Process

Object: To observe the fermentation process and how yeast reproduce through budding.



yeast



warm water



sugar



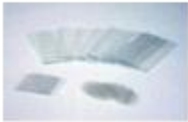
2 cup or bigger bowl



measuring cup



Measuring spoons



slides, coverslips



microscope

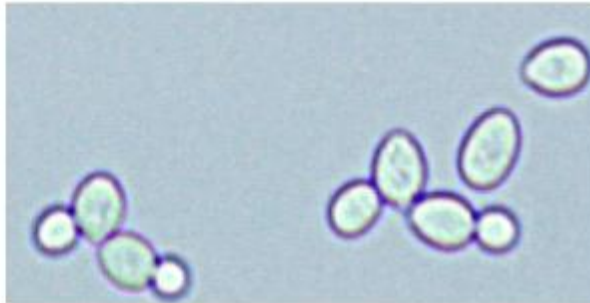


methylene blue



Stage 1: Grow the yeast

Stage 2: Observe it



Wake the yeast up by adding them to water and sugar mixture (the sugar is food).

Observe samples taken over the next hour. You should be able to see budding occurring when using the microscope.



With labs such as this one, the object is to observe. It is qualitative rather than quantitative.

You can use photos, text, or sketches to describe what you do and see.

Experiment 4.3 Molds and Mildew

Object: To observe various molds and mildews and the differences in how they look both macroscopically and microscopically.



bread



jelly



fruit



water



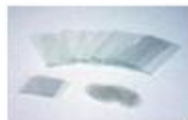
sewing needle



pipette (eyedropper)



magnifying glass



slides, coverslips



microscope

Hopefully, you took the advice in lecture 1 to start last week to get the mold growing.

Stage 1: Grow the mold

Stage 2: Observe it



With labs such as this one, the object is to observe. It is qualitative rather than quantitative.

You can use photos, text, or sketches to describe what you do and see.

Experiment 4.4 Imperfect Fungi

Object: To observe various molds and mildews and the differences in how they look both macroscopically and microscopically.



Camembert cheese



Roquefort cheese



water



knife



pipette (eyedropper)



magnifying glass



slides, coverslips



microscope

Look at the mold in blue or Roquefort cheese.

Get the mold from the cheese to observe under a microscope or with a magnifying glass.



With labs such as this one, the object is to observe. It is qualitative rather than quantitative.

You can use photos, text, or sketches to describe what you do and see.