

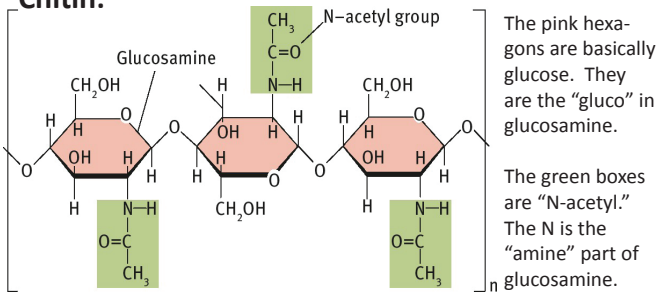
# FUNGI

What characteristics do all fungi share? (What allows them to be classified as fungi?)

1) The presence of **chitin** in the cell wall.

2) Usually, they have a **mycelium** made of **hyphae**.  
(Exception: Yeast is made of single cells.)

**Chitin:**



NOTE: Some fungi, such as the Zygomycota (listed below) don't have septa.

**NOTE:** There are a few fungus-like organisms that used to be classified as fungi but have been reassigned to Kingdom Protista. These include slime molds and water molds. Water molds include species that cause diseases in plants.

**We recognize fungi by their reproductive structures, or "fruiting bodies."** Mushrooms are reproductive structures. The actual "body" of a fungus is the mycelium. The mycelium is often invisible because the hyphae are microscopic.

NOTE: The largest mycelium in the world is in Oregon (Malheur National Forest) and covers over 2,000 acres!

**PHYLUM Ascomycota: "SAC FUNGI"**

Have (microscopic) oval sacs filled with spores


**PHYLUM Basidiomycota: "CLUB FUNGI"**

Have (microscopic) club-shaped "basidia," containing 4 spores.


**PHYLUM Zygomycota: "ZYGOTE FUNGI"**

Spore packets look like two things joined, or "zygotes."

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**PHYLUM Chytridiomycota: "CHYTRIDS"** (Chytrid is Greek for "little pot")

Spores have flagella and can swim. All species live in water or wet soil.

Examples: 1) Some species help to decompose dead things into dirt.  
2) Some attack plants and animals. One species is killing amphibians.