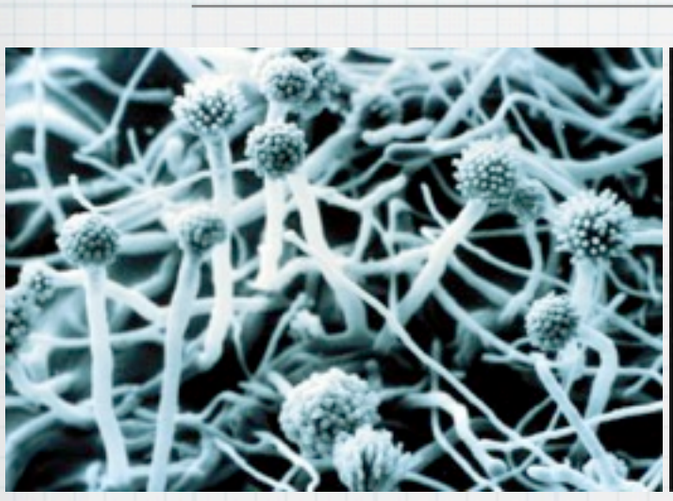
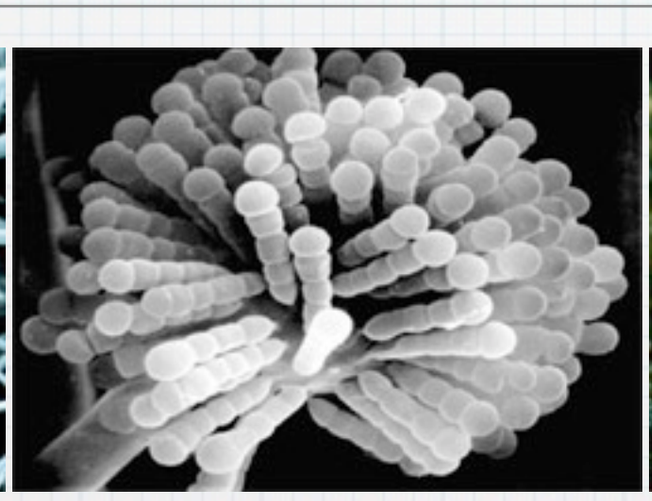
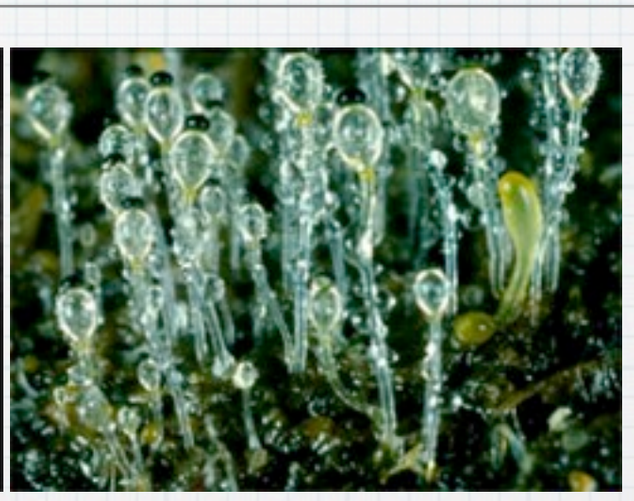
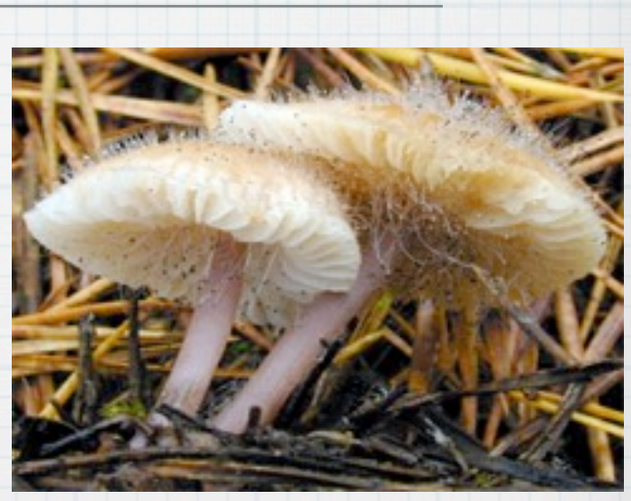
* Why did the mushroom get invited to the party?

Kingdom Fungi

Why are the important?

* Many are pathogens

Why are the important?

* Many are pathogens

Athletes Foot

Ringworm

Why are the important?

* Many are pathogens

Athletes Foot

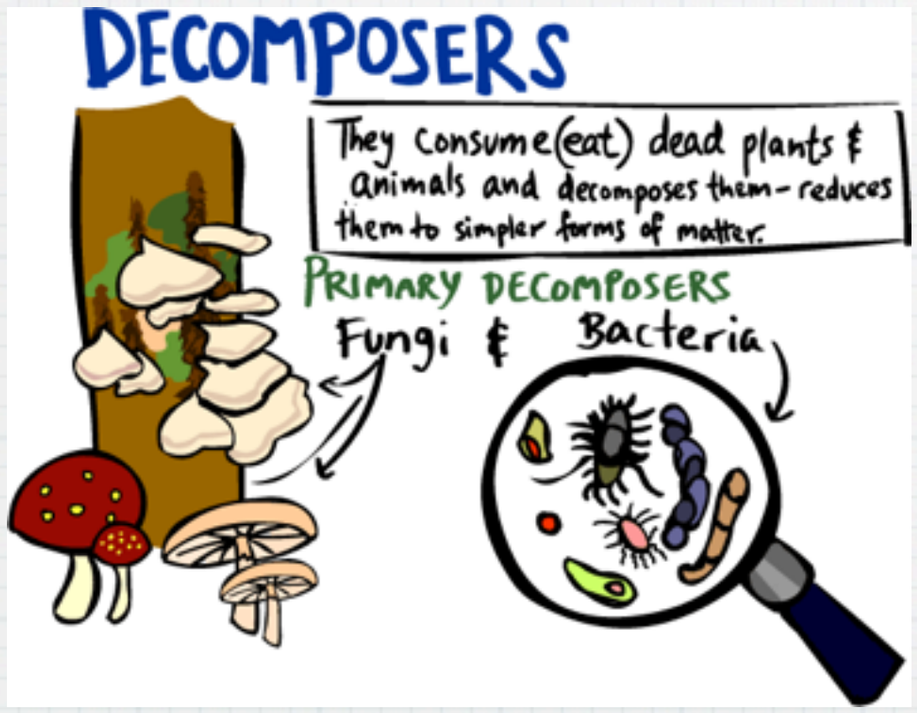
Ringworm

Why are the important?

* Many are decomposers

Why are the important?

* Many are decomposers



Why are the important?

* Some species produce antibiotics

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* Many are a form of food

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Why are the important?

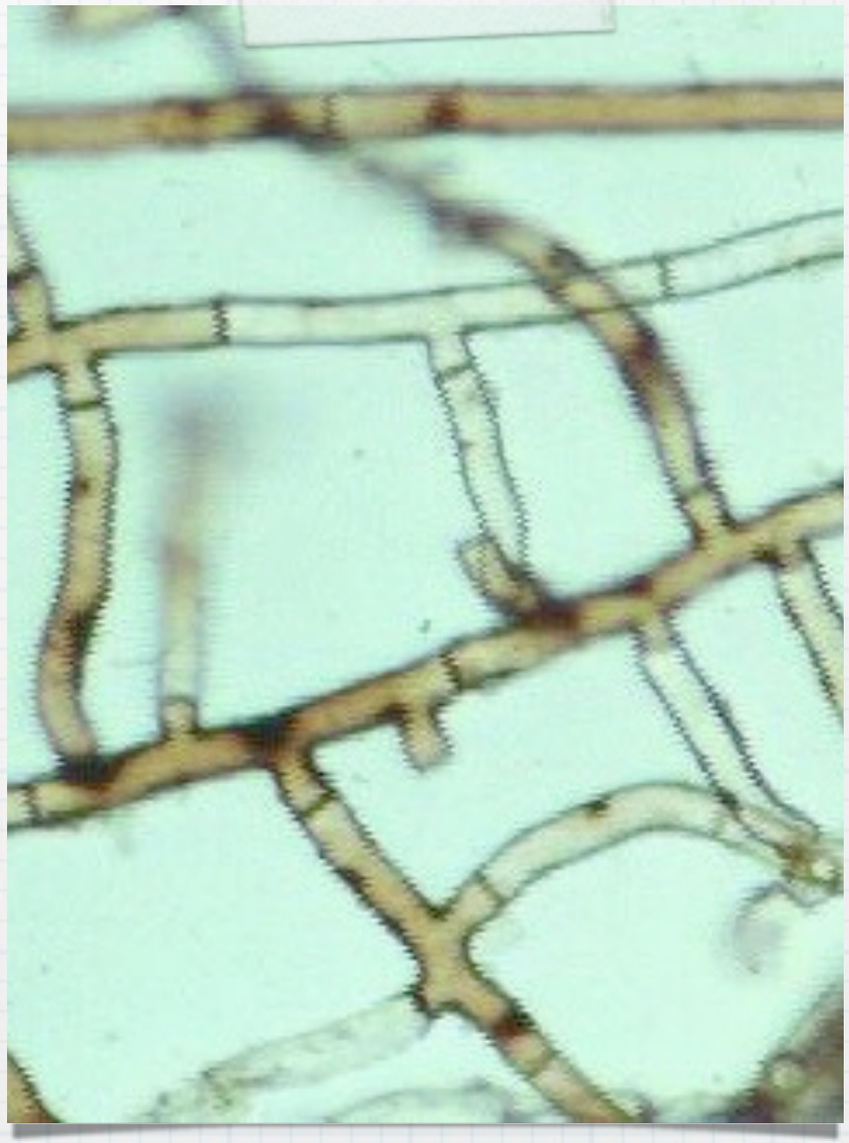
* Yeast is a fungus used in bread and beer

Why are the important?

* Yeast is a fungus used in bread and beer

Generalized Structure

* Made of thin filaments called hyphae



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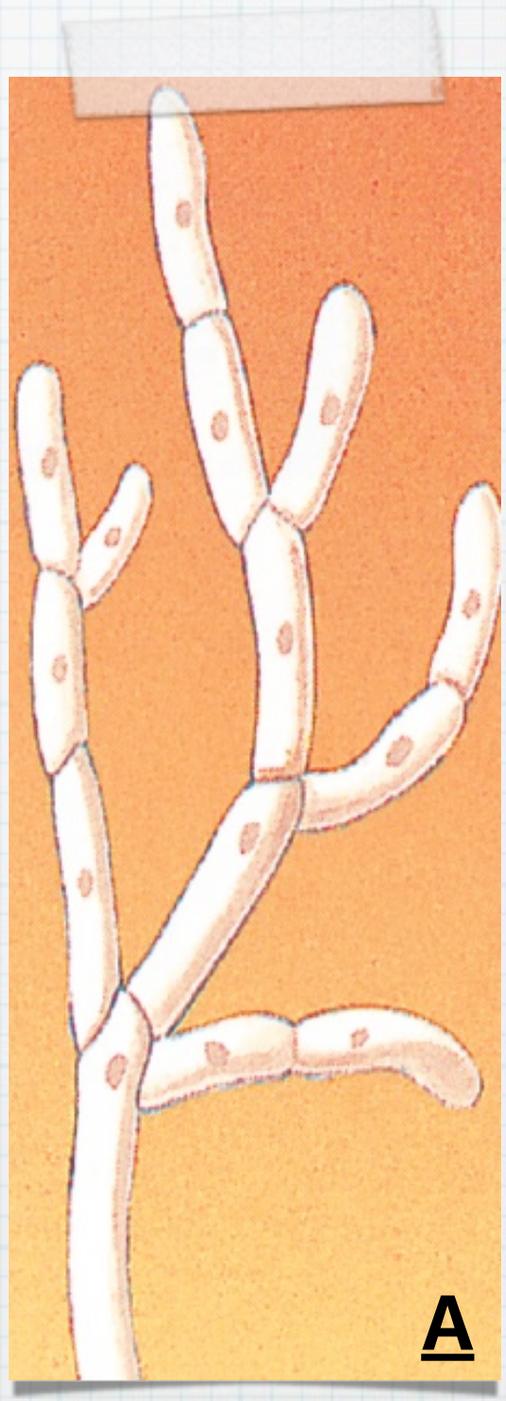

Generalized Structure

* Mycelium formed by many intertwined hyphae
* i.e. colony
* usually forms on or below surface of soil

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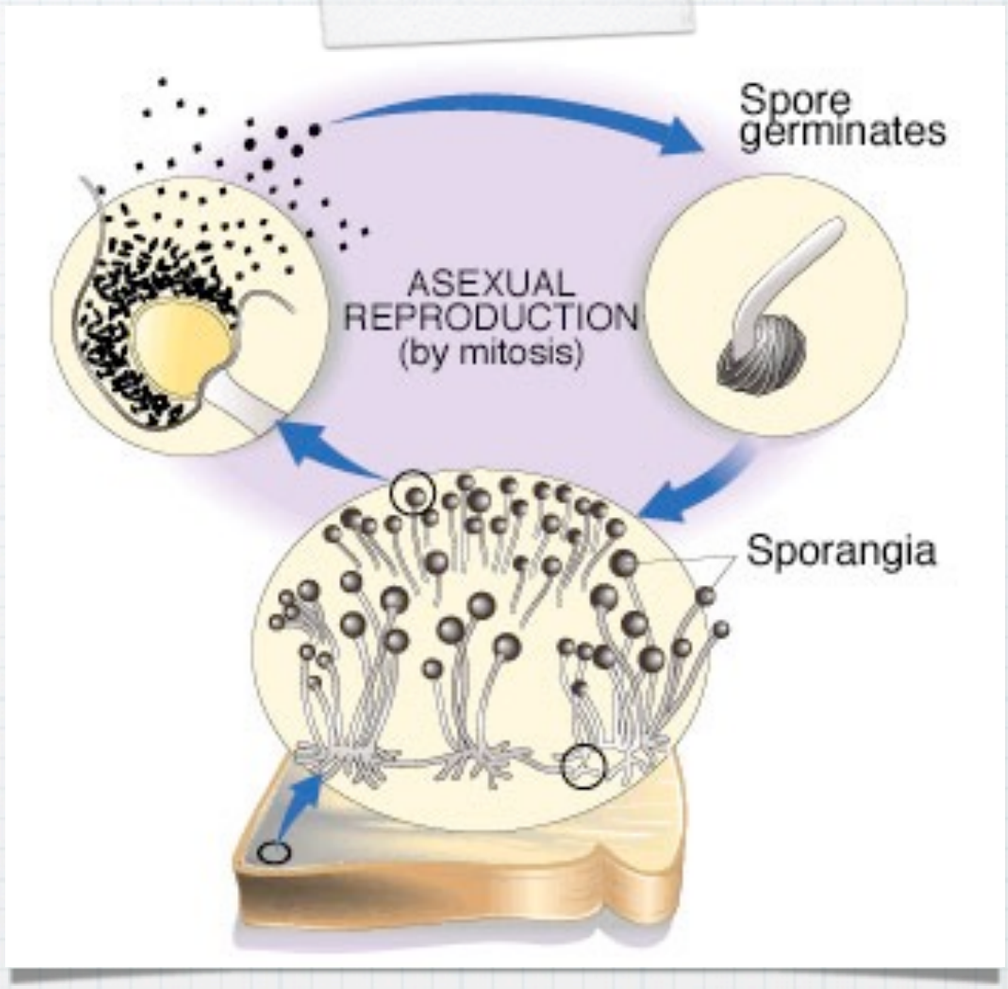
Life Cycle - Asexual Reproduction

* unicellular reproductive cells (ie. made of one cell)

* formed in specialized spore cases called sporangia (um)

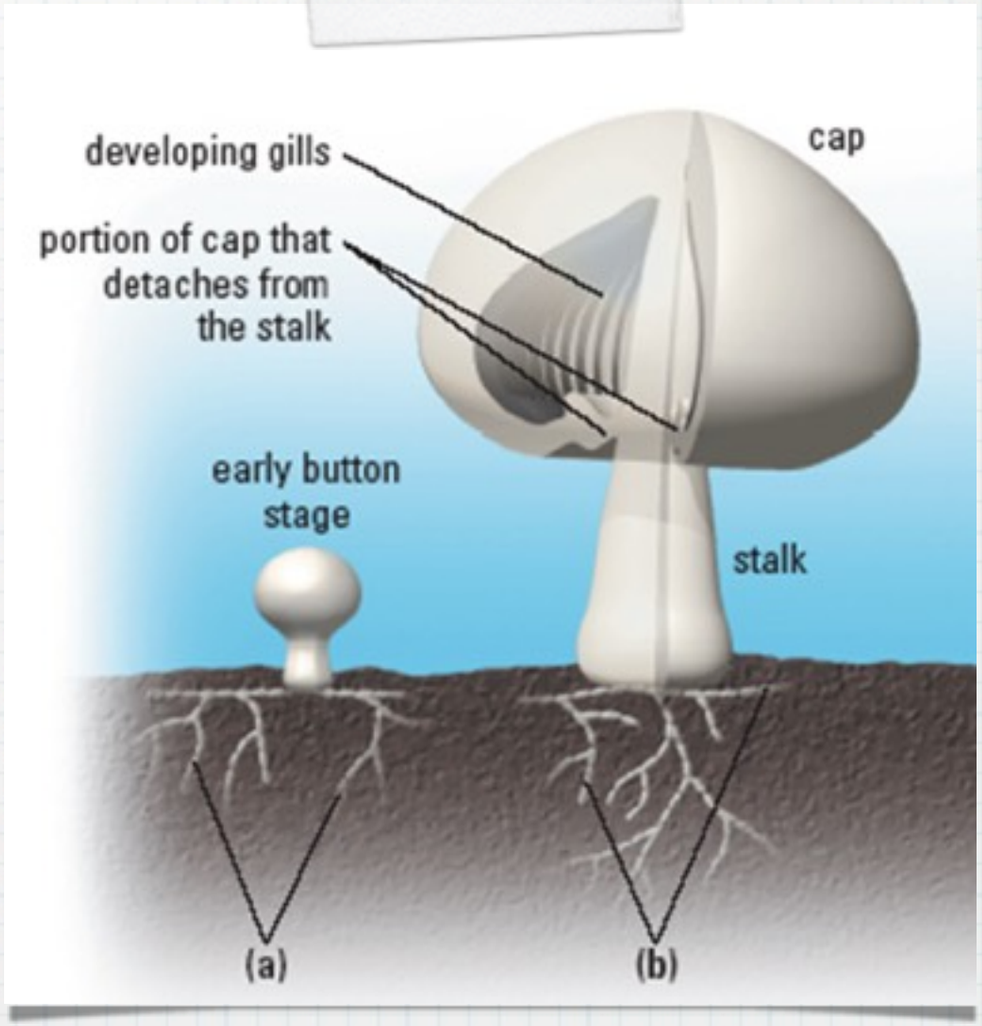


Life Cycle - Sexual Reproduction

* 2 nuclei in specialized hyphae fuse

* grow into a mushroom (fruiting body)

* sexually produced spores form on the inside of the gills



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Yeast

* different from other fungi because:
  * unicellular
  * reproduce asexually by budding
    * 1. nucleus doubles
    * 2. one nucleus moves into the bud
    * 3. bud grows & falls off to become a new yeast cell identical to parent

Similarities between plants and fungus

* eukaryotic cells
* numerous organelles
* multicellular (*except yeast)
* have cell walls
* anchored in soil
* stationary
* reproduce asexually or sexually

Differences between plants and fungus

Plants	Fungus
One nucleus per cell Autotrophs Have roots Cellulose in cell walls Reproduce by seeds	Many nuclei per cell Heterotrophic No roots Chitin in cell wall No seeds