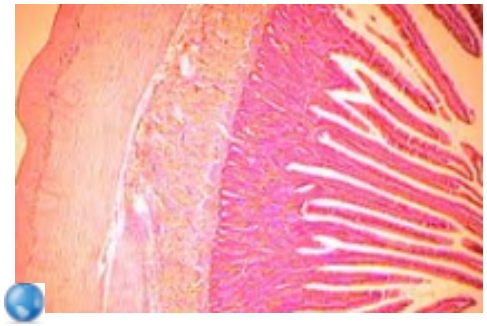
Chapter 20 Notes

What do all of these have in common?



Name as many different living organisms as you can.

Eubacteria

- Prokaryotes
- Found in _____ environment on earth
- Cell wall- made up of peptidoglycan
- Gene structure- no introns
- Gene translation- very _____ from eukaryotes and archaebacteria

Used for/ Found In

- Processing food

yogurt
olives
vinegar
sour cream
cheese
sauerkraut

- Producing chemicals
- Human body

Archaebacteria

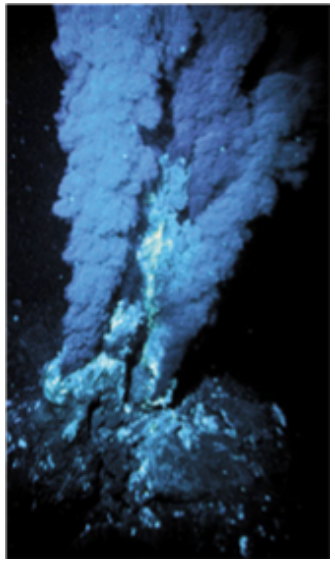
- Prokaryotes
- Cell wall and _____ that does not contain peptidoglycan
- Use different _____ than bacteria and eukaryotes
- Gene structure and _____ - introns, proteins similar to eukaryotes

Three major groups

- Methanogens- get energy from _____ gas, found in swamps

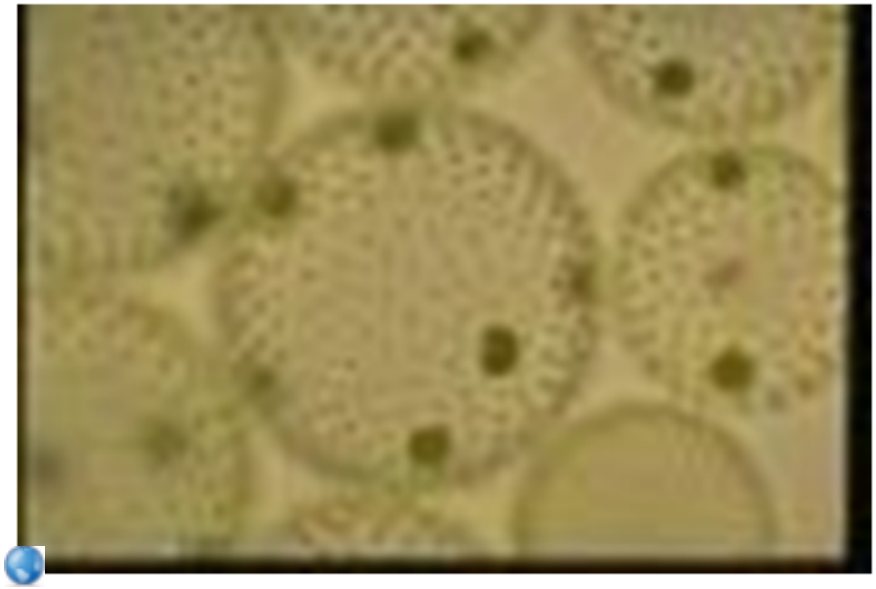
- Thermophiles- live in hot water _____ degrees

- Halophiles- _____ place like Great Salt Lake



Half the biomass on the earth is single celled organisms

- _____ organisms- group of cells that are permanently _____ but do not communicate with one another.



Aggregation-Temporary _____ of cells that come together for a period of time and then _____

Multicellular organism- Composed of many _____ and are permanently associated with one _____.

Quick Lab Page 437

Protists

- Most diverse kingdom

- Defines as eukaryotes that are NOT fungi, plant, or _____

- Unicellular (All single celled eukaryotes are protists [except for _____]

- Most important protist are the _____

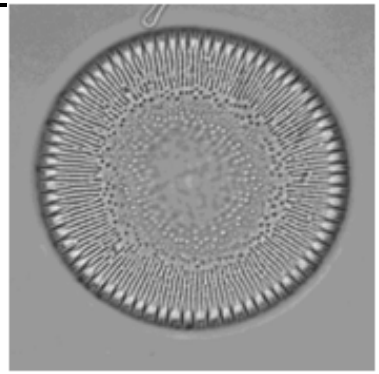
- They are the food basis for the ocean food web

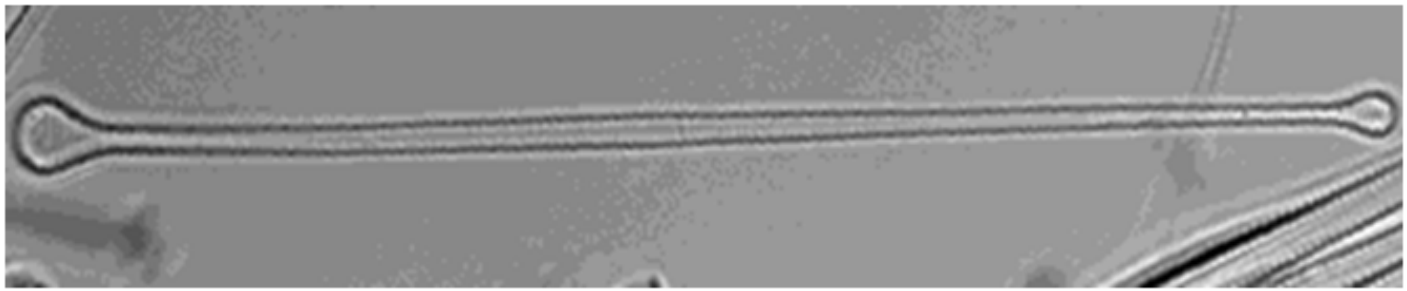
Protists the use pseudopodia

Protists that use flagella

Protists with double shells

- Diatoms are _____
- Double shells made of silica
- They are plankton

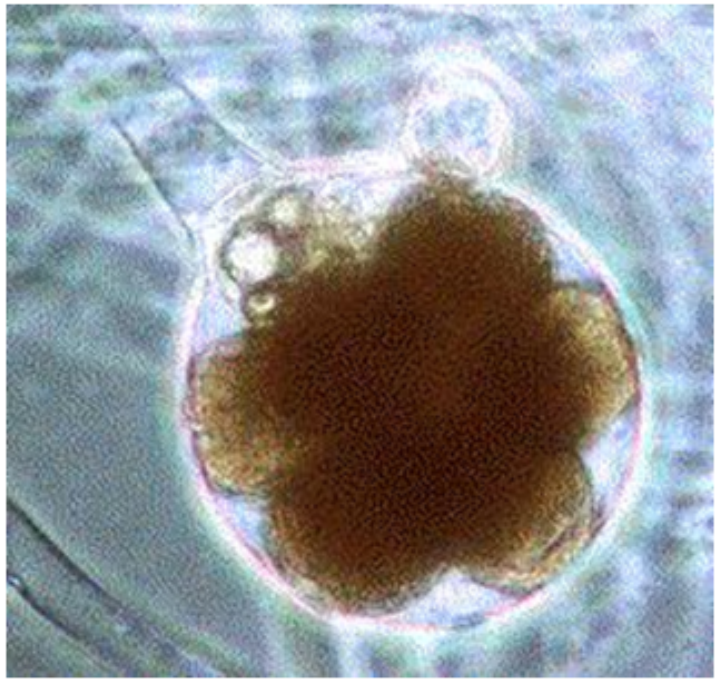




Photosynthetic algae

- Algae are divided by the types of _____ they contain
- Found in _____ and freshwater

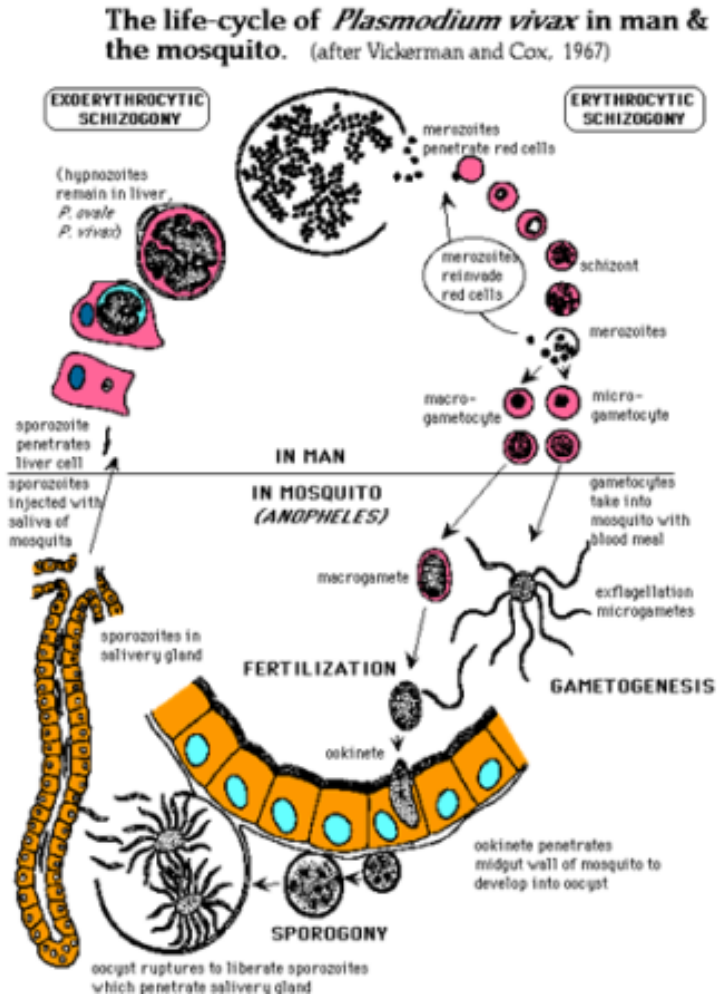
Funguslike protists



- Slime molds
- _____ molds
- They aggregate in time of _____
- Found in freshwater, damp soil, and forest floors

Spore-forming protists

- Nonmotile
- _____ parasites
- Complex life cycles



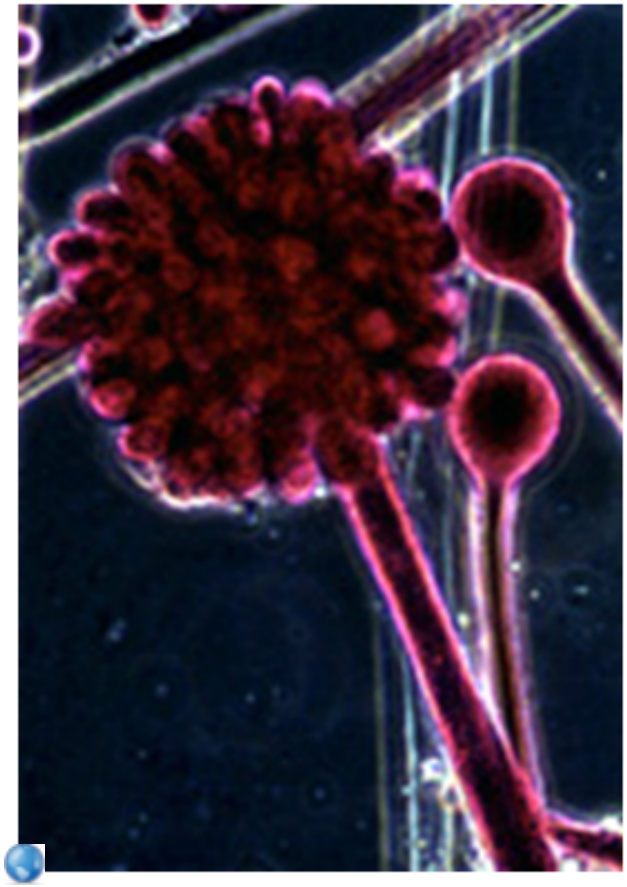
Fungi

- Appear as slender filaments barley visible to the _____ eye (hyphae)

- In some species the hypyae weave together to for _____ structures such as mushrooms

- The presence of _____ are a key way the fungi differ.

Zygomycetes



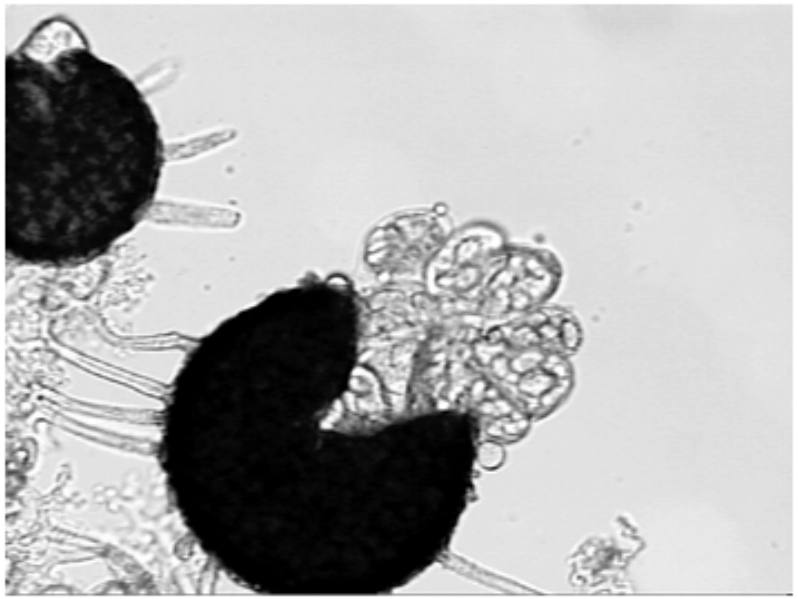
- Form structures for sexual reproduction called zygosporangia
- Common _____ mold

Basidiomycetes

- Includes fungi that make _____

- Mushrooms are the sexual reproductive structures of these

Ascomycetes



- Sexual reproductive sac like _____ called asci

Plants

- Multicellular autographs
- Can not move from one place to _____
- Structures such as pores and seeds _____ the plants
- Primary producers on terrestrial web
- _____ oxygen as gas
- Vascular tissue- a group of specialized cells that transport water and _____ nutrients

- Plants vary in Size
- Duckweed
- Redwood Tree

Nonvascular plants

- Do not have a well-developed system of _____ tissues

- Small plants

- Lack roots, _____, and leaves

Seedless Vascular Plants

- They have roots, stems, and leaves
- Waxy _____ on surface to prevent water loss
- Reproduce with spores that are _____ to drying
- Ferns

Nonflowering Seed Plants

- Gymnosperms _____ plants that reproduce by making seed but not flowers.
- Seeds might be in the _____ of cones.
- Seeds survive long and harsh conditions.

Flowering Seed Plants

- Produce seeds in fruits called angiosperms
- Fruits are structures that enable plants to spread their seeds.

Animals

- multicelluar
- diploid
- lack a cell wall
- have tissues and organs

Sponges

Cnidarians

http://www.cyhaus.com/marine/anemone.htm

http://www.ucmp.berkeley.edu/cnidaria/hydrozoa.html

Mollusks

Worms

Arthropods

Echinoderms