

## Bacterial Notes Worksheet

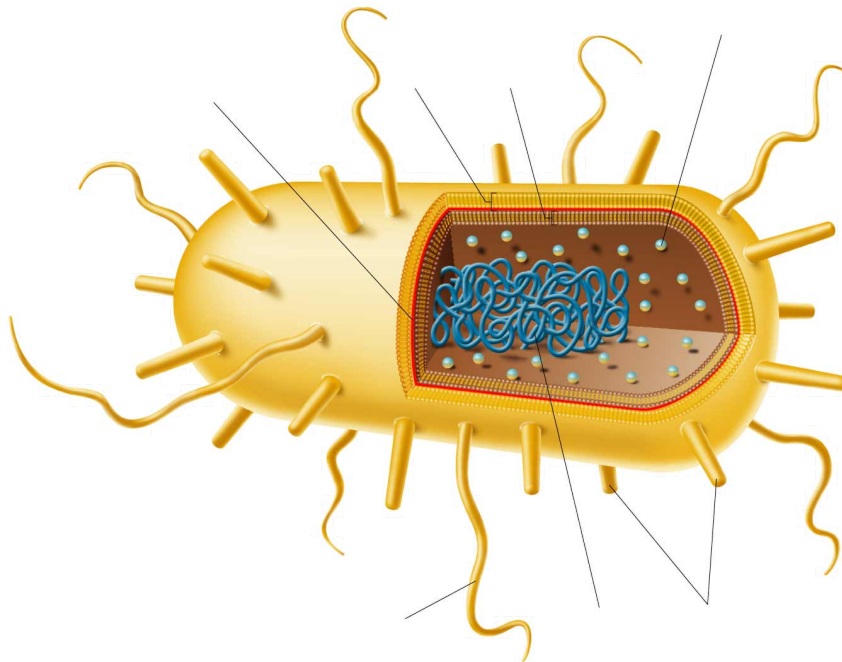
### Bacteria

- All prokaryotes - organisms that do NOT have a \_\_\_\_\_
- \_\_\_\_\_ - cannot be seen with naked eye.
- Classified into 2 kingdoms: \_\_\_\_\_ & \_\_\_\_\_
- **Archaeobacteria** – old, ancient
  - o Live in \_\_\_\_\_ environments
  - o \_\_\_\_\_ - produce methane gas
  - o \_\_\_\_\_ - live in salty environments
- **Eubacteria**
  - o \_\_\_\_\_ bacteria
  - o Most numerous, live almost everywhere

### Identifying Bacteria

- Bacteria can be identified by shape, chemical nature of their \_\_\_\_\_, how they move, and how they obtain \_\_\_\_\_
- **Bacteria Shapes**
  - o \_\_\_\_\_ - rod-shaped bacteria
  - o \_\_\_\_\_ - spherical (round) bacteria
  - o \_\_\_\_\_ - spiral or corkscrew shaped bacteria

**Label a bacterium.**



### Importance of Bacteria- bacteria are vital to maintaining the living world

- Some bacteria are \_\_\_\_\_; produce food through photosynthesis (1<sup>st</sup> link in food chains)

- Others are \_\_\_\_\_; they break down nutrients in dead matter and \_\_\_\_\_
- Nitrogen fixation – bacteria convert \_\_\_\_\_ gas in air to a form plants can use. Bacteria live in \_\_\_\_\_ nodules in legume plants (\_\_\_\_\_)

**Human Uses of Bacteria** - our bodies are covered in bacteria, some harmful, many are not

- E. coli bacteria in our intestines produce \_\_\_\_\_ that our body cannot make. Example of a \_\_\_\_\_ relationship.
- Use bacteria for making food – cheese and \_\_\_\_\_
- Archaeobacteria are used for purifying \_\_\_\_\_ (sewage, oil spill)

### **Bacterial Diseases in Humans**

- Bacteria produce disease in 2 ways:
  1. Damage \_\_\_\_\_ & tissues Ex: strep throat, tuberculosis, bubonic plague
  2. Produce \_\_\_\_\_ Ex: salmonella, botulism

### **Preventing Bacterial Diseases**

- \_\_\_\_\_ - weakened form of bacteria that stimulate the \_\_\_\_\_ system to produce \_\_\_\_\_ against the disease.
- \_\_\_\_\_ - compounds that stop bacterial growth. Antibiotics work only on \_\_\_\_\_ diseases.

**Controlling Bacterial Growth**- There are various methods used to control bacterial growth

- Sterilization – exposure to \_\_\_\_\_
- Disinfectants - \_\_\_\_\_ solutions that kill bacteria. Ex: \_\_\_\_\_ and cleaners
- Food Processing - \_\_\_\_\_, using preservative chemicals (preservatives)