**Unit C Study Guide**

**Chapter Nine: Disease**

* + Communicable
    - Airborne
    - Water-borne
    - Carried in Food
    - Direct Contact
  + Non-communicable
    - Bad environmental conditions
    - Poor diets
    - Unhealthy lifestyle
    - Genetics
* Microbes
* Pathogens:
  + Bacteria
    - Conditions for reproduction
    - Antibiotics will help cure this
  + Virus
  + Fungi
  + Protist
* Food Preservation
  + Smoking or drying food
  + Canning
  + Salting
  + Refrigeration
  + Freezing
  + Chemical additives
  + Vacuum packaging
  + Irradiation
  + Pasteurization
* Keeping healthy
  + Sterilization
  + Aseptic
  + Sanitary

**Chapter Ten: Society’s Response to Disease**

* Pandemic
  + Bubonic Plague
  + Spanish Flu
  + AIDS
* Epidemic
  + Tuberculosis
* Improving Human Health
  + Public Health
    - Water Quality
    - Removal of Garbage
    - Treatment of Human and Animal Wastes
    - Air Quality
    - Mass Vaccinations
    - Food Safety

**Chapter Eleven: Protecting Yourself From Disease**

* Defense against Pathogens
  + First Line of Defense- physical defenses
  + Second Line of Defense- inflammatory response
  + Third Line of Defense- immune response (macrophages, t-cells, b-cells, antigens, antibodies) *see pg.198*
* Immunity:
  + Inherited- get from parents
  + Acquired- develop over lifetime
    - Active- body makes own antibodies
      * Natural- get sick
      * Artificial- vaccine
    - Passive- antibodies introduced to body
      * Natural- breast milk
      * Artificial- antitoxin
* Vaccines/ Immunization

**Chapter Twelve: Genetics and Health**

* Genetics
* Hierarchy of body: (smallest to largest)
  + Base pairs- Genes- Chromosomes- DNA strand- Cell- Body
* Heredity (passing on from parents to offspring)
* Purebred
* Hybrid
* Dominant vs recessive
* Genotype: combination of genes (BB, Bb, bb)
* Punnett Squares
* Pedigrees
* Mutation
  + Caused by mutagen (environment)
  + Caused by genetics
* Genetic disorder
* Genetic engineering
* Concerns about genetic research