

Name: \_\_\_\_\_ Date: \_\_\_\_\_ # \_\_\_\_\_

## Chapter 1: Rot and Decay

- Organic Remains
  - Organic:
    - material that come from things that were alive
  - Organisms:
    - living things
  - Waste:
    - anything that is discarded because it is used up, worn out, or no longer needed
- What Happens to Nature's Waste?
  - All living things decompose
    - Rot, decay, and break down into smaller pieces
  - Organic remains decompose because other living things are feeding on them
    - Contain nutrients
      - Vitamins and minerals needed for growth and life
  - Nature's recyclers are the organisms feed upon organic remains
    - Break down and recycle nutrients (used again)
    - Biodegradable: able to be decomposed by living things
- What Happens to People's Waste?
  - Much is NOT made from living or once-living things
    - Nature's recyclers can't feed on inorganic remains

- Waste that is naturally biodegradable won't decompose because nature's recyclers can't live there since there isn't enough soil, light or water for them to survive.
- People Doing Science
  - In "The Garbage Project" they found that almost half the space in landfills was taken up by organic materials.

Material	Time Needed to Decompose
Cotton rags	1-5 months
Paper	2-5 months
Cigarette butts	1-12 years
Aluminum cans	80 years
Plastic soda bottles	450 years
Styrofoam	More than 1,000,000 years

- Technology and Inventions
  - Biodegradable Plastics are made from wheat and cornstarch.
    - Unlike some waste products this plastic isn't around forever!