- 25: Steps of DIGESTION
- □Ingestion: taking in food
- Digestion: breaking down food into nutrients
- □Absorption: taking in nutrients by cells
- □ Egestion: removing any leftover wastes

### 26: Types of DIGESTION

- Mechanical (physical)
  - Mouth / Teeth / Stomach
    - Chew, Tear, Grind, Mash, Mix
- Chemical
  - ACIDS and ENZYMES breakdown:
    - Carbohydrates (sugars / starches)
    - Proteins (meat / nuts)
    - Lipids (fats / oils)

# 27: Digestive System Parts

- MOUTH: mechanical breakdown, starts chemical of carbs by saliva
- **ESOPHOGUS**: "food tube" to stomach, secretes lubricating mucus, PERISTALSIS
- **STOMACH**: "J" shape mechanical muscle / enzymes and acids chem. breakdown of fats, proteins
- 4 **SMALL INTESTINE**: absorption
  - VILLI- diffusion of nutrients into capillaries
- 5 LARGE INTESTINE: absorbs water
- 6 **RECTUM**: stores feces / whatever is left

## 28: Circulatory System

- -transport oxygen and nutrients to cells
- -<u>carry wastes away from cells</u> to organs for disposal
- PARTS
  - HEART- pumps
  - BLOOD
    - □ Ateries away from Heart / Veins toward
    - □ CAPILLARIES: tiny vessels that connect them

### 29: Parts of Heart

- ☐ **SEPTUM** divides the heart into two sides
- ☐ ATRIUM Upper chambers of the heart (<u>receive the blood</u> thinner walls)
- ☐ VENTRICLES Lower chambers of the heart (pumps blood out of the heart-thicker muscular walls)
- VALVES help stop the blood from flowing backwards

### 30: Blood Cells

■ RED : no nucleus / dohnut shaped / carry oxygen to cells / made in bone marrow

WHITE: large / no shape / identify and kill pathogens (microscopic invaders, microbes) / have nucleus

PLATELETS: very small / clotting / heals cuts