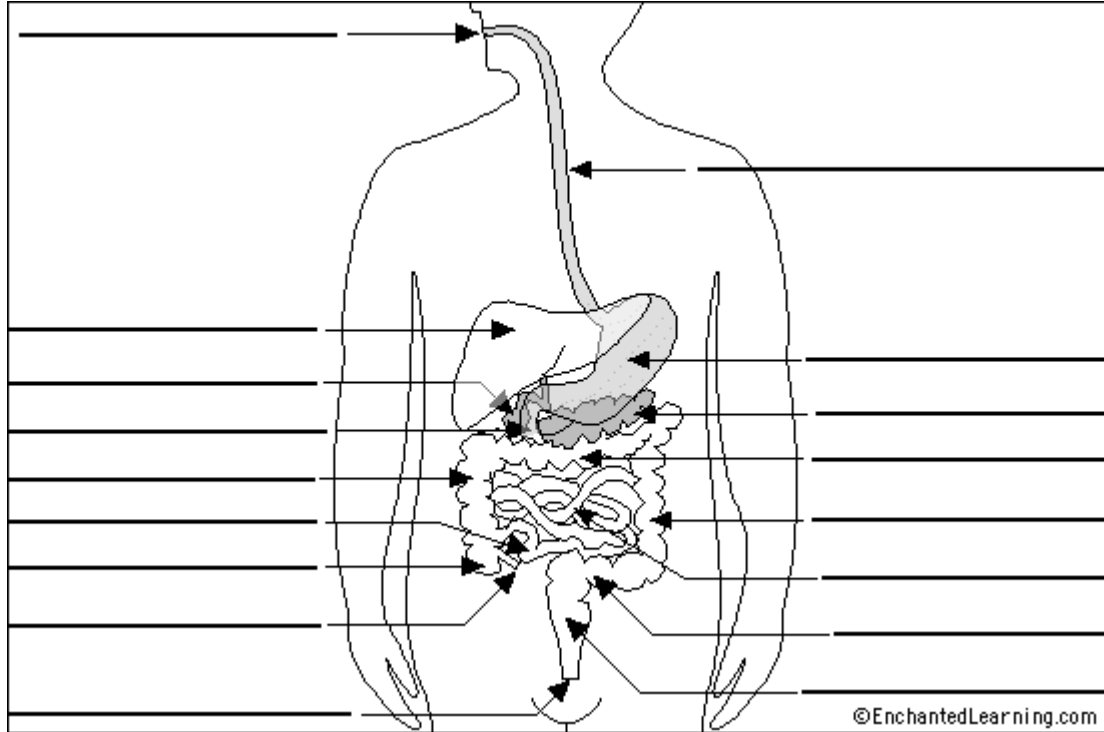


## SBI 3C: DIGESTIVE SYSTEM:

### DIGESTIVE SYSTEM DIAGRAM:



### STAGES OF DIGESTION:

1. \_\_\_\_\_
  - ▶ \_\_\_\_\_
2. \_\_\_\_\_
  - ▶ Breakdown \_\_\_\_\_ into smaller components by \_\_\_\_\_ and \_\_\_\_\_ means \_\_\_\_\_
3. \_\_\_\_\_
  - ▶ Absorbing digested \_\_\_\_\_ into \_\_\_\_\_ of digestive tract
4. \_\_\_\_\_
  - ▶ Removal of \_\_\_\_\_ food materials from the body

### STEP 1: INGESTION:

- ▶ Teeth \_\_\_\_\_ the food
- ▶ \_\_\_\_\_ moistens
- ▶ \_\_\_\_\_ in saliva ( \_\_\_\_\_ ) breaks down \_\_\_\_\_
- ▶ Muscular \_\_\_\_\_ pushes food back to \_\_\_\_\_
- ▶ Epiglottis – flap covers \_\_\_\_\_ so food doesn't get in
- ▶ Food \_\_\_\_\_ walls of \_\_\_\_\_ and moves downward through waves of \_\_\_\_\_ called \_\_\_\_\_

## STEP 2: DIGESTION:

### ▶ STOMACH:

- ▶ Food moves in and out through \_\_\_\_\_ (circular muscles)
- ▶ Stomach \_\_\_\_\_ and \_\_\_\_\_ to churn the food
- ▶ \_\_\_\_\_:
  - ▶ Breaks down \_\_\_\_\_
  - ▶ \_\_\_\_\_ foreign organisms ( \_\_\_\_\_ ) in food
- ▶ \_\_\_\_\_:
  - ▶ \_\_\_\_\_
  - ▶ Breaks down \_\_\_\_\_ into \_\_\_\_\_
- ▶ \_\_\_\_\_:
  - ▶ Protects stomach \_\_\_\_\_ from \_\_\_\_\_
- ▶ Some absorption of \_\_\_\_\_, \_\_\_\_\_ and \_\_\_\_\_ here

### ▶ SMALL INTESTINE:

- ▶ Up to \_\_\_\_\_ in length, \_\_\_\_\_ in \_\_\_\_\_
- ▶ The small intestine is divided into \_\_\_\_\_ parts: the \_\_\_\_\_, the \_\_\_\_\_, and the \_\_\_\_\_
- ▶ It is the \_\_\_\_\_ site of \_\_\_\_\_ absorption to the blood
- ▶ Secretes \_\_\_\_\_ which completes digestion of \_\_\_\_\_
- ▶ Only the small intestine can absorb \_\_\_\_\_ (fats), \_\_\_\_\_, and \_\_\_\_\_ (from proteins)

## ACCESSORY ORGAN: PANCREAS:

- ▶ Secretes \_\_\_\_\_ enzymes \_\_\_\_\_, \_\_\_\_\_, and \_\_\_\_\_ into the \_\_\_\_\_ to break down carbohydrates, proteins and fats
- ▶ Neutralizes \_\_\_\_\_ stomach contents (called \_\_\_\_\_) before they enter the \_\_\_\_\_

## ACCESSORY ORGAN: LIVER:

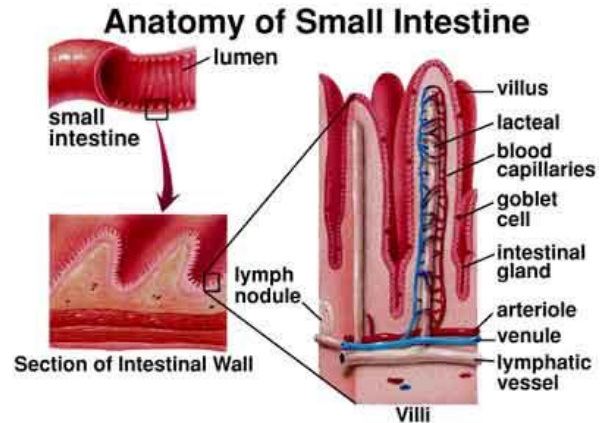
- ▶ Weighs between \_\_\_\_\_, \_\_\_\_\_ of adult human body weight
- ▶ Besides \_\_\_\_\_, it is the \_\_\_\_\_ organ
- ▶ **Roles:**
  - ▶ \_\_\_\_\_ and \_\_\_\_\_ blood draining from the \_\_\_\_\_, small intestine, large intestine, \_\_\_\_\_ and \_\_\_\_\_
  - ▶ Stores \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_ and \_\_\_\_\_
  - ▶ Converts \_\_\_\_\_ and \_\_\_\_\_ into active forms
  - ▶ Makes \_\_\_\_\_ which helps break down \_\_\_\_\_

## ACCESSORY ORGAN: GALLBLADDER:

- ▶ \_\_\_\_\_ and \_\_\_\_\_ bile and delivers it to the \_\_\_\_\_ during a \_\_\_\_\_
- ▶ Not an \_\_\_\_\_ organ, people can live without their gallbladder
- ▶ Gallbladder is sometimes \_\_\_\_\_ because of \_\_\_\_\_ which are hard “stones” made of \_\_\_\_\_ and \_\_\_\_\_

## STEP 3 ABSORPTION:

- ▶ Most \_\_\_\_\_ of \_\_\_\_\_ takes place in small intestine
- ▶ Small intestine is lined with \_\_\_\_\_:
  - ▶ Finger-like \_\_\_\_\_ that increase \_\_\_\_\_ for absorption



## LARGE INTESTINE:

- ▶ Large intestine is \_\_\_\_\_ in length
- ▶ The large intestine (also known as the \_\_\_\_\_) reabsorbs \_\_\_\_\_ and \_\_\_\_\_
- ▶ Harmless \_\_\_\_\_ live here producing vitamin \_\_\_\_ and \_\_\_\_
- ▶ Any \_\_\_\_\_ food that remains is called \_\_\_\_\_
- ▶ Fecal matter is stored here before \_\_\_\_\_ through the anus

## STEP 4: EGESTION:

- ▶ Occurs in the \_\_\_\_\_
- ▶ Main component of feces:
  - ▶ \_\_\_\_\_: makes up \_\_\_\_\_, cannot be digested by humans
  - ▶ Living and dead \_\_\_\_\_
  - ▶ \_\_\_\_\_
- ▶ \_\_\_\_\_ wastes are removed through \_\_\_\_\_
  - ▶ People who don't eat enough \_\_\_\_\_ (plant material and fibre) have \_\_\_\_\_ bowel movements and are at risk of \_\_\_\_\_

## EXCRETORY SYSTEM:

### KIDNEYS:

- ▶ About the size of a \_\_\_\_\_
- ▶ Weighs approximately \_\_\_\_\_
- ▶ Located on \_\_\_\_\_ of upper \_\_\_\_\_ at either side of \_\_\_\_\_ column
- ▶ Filter \_\_\_\_\_ and remove \_\_\_\_\_
  - ▶ Hold as much as \_\_\_\_\_ of body's \_\_\_\_\_ at any time

## BLOOD PATHWAY:

- ▶ Blood is brought to kidneys by \_\_\_\_\_
  - ▶ \_\_\_\_\_ refers to kidney
- ▶ Kidneys form \_\_\_\_\_ which is filtered from \_\_\_\_\_
- ▶ \_\_\_\_\_ blood returns to circulatory system by \_\_\_\_\_

## URINE PATHWAY:

- ▶ Urine travels from \_\_\_\_\_ to \_\_\_\_\_
- ▶ Urinary \_\_\_\_\_ keeps \_\_\_\_\_ in bladder
- ▶ When approximately \_\_\_\_\_ is collected, bladder \_\_\_\_\_ and sends \_\_\_\_\_ to brain to go to bathroom
- ▶ When bladder fills to \_\_\_\_\_ signal becomes more \_\_\_\_\_
- ▶ If bladder fills to \_\_\_\_\_, voluntary control is lost

## PROTEIN BREAKDOWN:

- ▶ Humans eat \_\_\_\_\_ for \_\_\_\_\_
- ▶ Amino acids are made into \_\_\_\_\_ used to \_\_\_\_\_ and \_\_\_\_\_ body tissues
- ▶ \_\_\_\_\_ amino acids are broken down in \_\_\_\_\_
- ▶ These amino groups are converted into \_\_\_\_\_ which is very \_\_\_\_\_ to the body
- ▶ In the liver, \_\_\_\_\_ is combined with \_\_\_\_\_ to produce \_\_\_\_\_
- ▶ Urea is dissolved in \_\_\_\_\_ and carried to the \_\_\_\_\_ where it is excreted in \_\_\_\_\_

## KIDNEY DISEASE:

- ▶ Kidney \_\_\_\_\_:
  - ▶ Dissolved \_\_\_\_\_ in blood form \_\_\_\_\_
  - ▶ \_\_\_\_\_ edges can \_\_\_\_\_ tissues as they move and cause \_\_\_\_\_
- ▶ Kidney Failure:
  - ▶ Kidneys are not working to \_\_\_\_\_ the \_\_\_\_\_
  - ▶ **Treatments:**
    - ▶ \_\_\_\_\_: machine \_\_\_\_\_
    - ▶ Transplant: \_\_\_\_\_ kidney from family member or match \_\_\_\_\_
    - ▶ Single kidney: blood flow \_\_\_\_\_ to healthy kidney