**BODY ORGANIZATION**
1-What are the levels of organization in a mammal from simplest to most complex?

CELLS -> TISSUES -> ORGANS -> ORGAN SYSTEMS

2-What is an example of each level of organization in a mammal body?

CELLS = ex. NEURONS

TISSUES = ex. BONE

ORGANS = ex. BRAIN

ORGAN SYSTEMS = ex. DIGESTIVE

**HOMEOSTASIS**
1-Why do you sometimes shiver when you are cold?

YOUR MUSCLES ARE CONTRACTING IN ORDER TO RELEASE HEAT.

2-What is the correct order of events for maintaining blood glucose?

1st – THE BODY ABSORBS FOOD MOLECULES AFTER EATING.

2nd – THE LEVELS IF GLUCOSE IN THE BLOOD RISE.

3rd – THE LIVER REMOVES GLUCOSE FROM THE BLOOD.

4th – AS THE BODY USES GLUCOSE FOR ENERGY, THE LIVER RELEASES ITS STORED GLUCOSE INTO THE BLOOD.

3-Which disease is caused by an imbalance of blood glucose?

DIABETES

**NUTRITION**
1-How are calories (the energy available in food) measured?

BY BURNING THE FOOD TO RELEASE HEAT

2-What is a calorie?

THE AMOUNT OF ENERGY NEEDED TO RAISE THE TEMPERATURE OF 1 g OF WATER BY 1 deg CELSIUS.

**NUTRIENTS**
1-Starches are made up of simple sugars. What makes up proteins?

AMINO ACIDS

1-Which food is a good source of water soluble vitamins?

CITRUS FRUITS

2-Which foods are a major source of Vitamin D?

MILK, YOGURT and CHEESE

**DIET**
1-Which foods are low in saturated fats?

OILS WITH DOUBLE BONDS BETWEEN THEIR CARBONS (ex. olive oil)

**DIGESTION**
1-Where does chemical digestion begin?

MOUTH
2-Which enzyme breaks down starches in the mouth?  
**SALIVARY AMYLASE**

3-What is the food slurry in the stomach called?  
**CHYME**

**DIGESTIVE SYSTEM ANATOMY**
1-Which muscular tube carries food from the pharynx to the stomach?  
**THE ESOPHAGUS**

**FECES FORMATION**
1-What is an example of a food high in fiber/cellulose?  
**WHOLE GRAIN BREAD**

2-What is left behind after organic molecules have been absorbed in the small intestine?  
**WATER AND CELLULOSE**

**EXCRETION**
1-What role does the skin play in excretion?  
**THE SKIN SECRETES EXCESS WATER AS SWEAT.**

2- What is the function of sweating?  
**BODY COOLING**

3-What is the function of the excretory system?  
**TO CONTROL HOMEOSTASIS AND REMOVE WASTES**

4-Which organ removes excess water, urea and metabolic waste from the blood?  
**KIDNEY**

5-What is the process by which substances are removed from the blood in the kidney?  
**FILTRATION**

6-Which part of the nephron is responsible for filtration of the blood?  
**GLOMERULUS**

7-Other than hormones, what controls the activity of the kidney?  
**THE COMPOSITION OF THE BLOOD**

8-Where does filtered blood leave the kidney and return to circulation?  
**RENAL VEIN**

9- What is the function of dialysis?  
**THE MACHINE FILTERS WASTES FROM THE BLOOD FOR THE PATIENT.**

10-From a urinanalysis, how does a lab technician know that a patient has diabetes?  
**HIGH LEVELS OF GLUCOSE IN URINE**