

## UNITED NATIONS SCHOOL I.E.D. PREPARATORY WORKSHOP SECOND TRIMESTER BIOLOGY 6°

## Copy and solve in the notebook DELIVERY DATE JULY 15

NAME	CRADE	DATE
	UNADL	VAIL

1. pH is a measure of the degree of acidity or basicity of a medium. A pH less than 7 is acidic and one greater than 7 is basic. When the pH is 7, the medium is said to have been neutralized. The following table shows the pH of some commonly used foods and products.

Substance	Milk	Wine	coffe	Vinegar	Egg white	Milk of Magnesia	Coca cola
рН	6,6	3,5	5,0	2,9	7,8	10,5	2,8

Due to Pablo's high stomach acidity, his doctor advises him to ingest some substances that neutralize the acidity. According to the above information, what the doctor will most likely suggest Pablo to take?

2. The following table shows some of the functions performed by the organs of the human digestive system and the order in which they occur

ORGAN	FUNCTIÓN	
MOUTH	There the food is crushed, the alimentary bolus is formed.	1
ESOPHAGUS	Allows the passage of the alimentary bolus into the stomach	2
STOMACH	It produces gastric juices that transform the alimentary bolus into chyme.	3
LIVER	Produces bile that helps in the digestion of fats	4
PÁNCREAS	Produces pancreatic juice that helps digest food	5
SMALL INTESTINE	Absorbs food	6
LARGE INTESTINE	Forms the fecal bolus	7

According to the previous information, answer the following questions and justify each answer.

- A. The production of gastric juices is necessary for the absorption of food to occur?
- B. Pancreatic juice acts on the bolus?
- C. Bile production does not intervene in the digestion of fats?
- D. Food absorption occurs after the formation of the fecal bolus has occurred?

3. Diabetes is a disease characterized by excess sugar in the blood and urine. An appropriate diet for your treatment should be low in carbohydrates and fat.

The following table shows the nutritional information for four foods:

	Food W	Food X	Food Y	Food Z
Fat	1 g	0,25 g	0,20 g	2,3 g
Sodium	0 g	14 mg	93 mg	5 mg
Carbohydrates	25 g	0 g	3 g	18 g
Proteíns	3 g	7,5 g	0,8 g	2 g

According to the information in the table, what is the most appropriate food in the diet of a diabetic?

- 4. What is The type of nutrition in which organisms obtain their food from other organisms or their remains?
- 5. Write if each of the following statements is true o false and justify each answer.
  - A. Chemoautotrophic organisms carry out photosynthesis
  - B. Nutrients enter the cell through the cytoplasm
  - C. All organisms perform the function of nutrition
  - D. Plants are heterotrophic organisms
- 6. A balanced diet should include foods belonging to the three basic groups, according to their function in the body: builders, energetics and regulators. According to the above, how would be an ideal breakfast?
- 7. Which are organic substances that the body uses to grow, repair damaged parts of the body or repair those that do not efficiently fulfill their function?
- 8. Animals' teeth adapt to the type of food they consume; This is because each of the groups of teeth has a specific function in the process of ingesting and chewing food. Teeth can be of 4 types: incisors (cut food), canines (tear food) and molars (grind or crush food). If we find the skull of an unknown animal and see that it has large incisors, strong molars but no canines (fangs), we can deduce what type of organism that this organism was?



- 9. The tapeworm or tapeworm is a parasite of some mammals, it is located in the small intestine of the host, feeding on the nutrients of its victim (already digested and ready to be absorbed), causing nutritional damage that can lead to malnutrition and death. For this reason, the tapeworm He has lost his digestive system. Explain why
- 10. An inadequate diet that does not provide the nutrients that the body requires, or that provides them in excess, can cause physiological disorders or different diseases. What is the name of the nutritional disorder generated by the consumption of nutrients in quantities lower than those required by the body?
- 11. What is the name of the eating disorder caused by anxiety and exaggerated concern for personal appearance, with episodes of excessive food consumption and subsequent provocation of vomiting, use of laxatives or abuse of exercise?
- 12. Heterotrophic nutrition occurs in six stages: ingestion, digestion, absorption, circulation, metabolism and excretion. The processes of:
- Transformation of food into assimilable particles
- > Transport of nutrients to each cell of the body
- Elimination of waste produced during metabolism

What is the name of each stage of the nutrition process?