VICTORIA THANG LONG SCHOOL
School year: 2021-2022/ Class:

Name: _____
Subject: Science

THE STUDY GUIDE FOR THE 1ST MID-TERM TEST

PART I. MATH VOCABULARY & KNOWLEDGE REVIEW (Week 1-10)

Topic	Science vocabulary	Science knowledge
Characteristics of Living Things	*organism, cell, unicellular, multicellular, essential, response, stimulus, reproduce, lichen.*	❖ An organism is any living thing. ❖ All organisms share several important characteristics: • All organisms *are made of cells*. • All organisms *contain similar chemicals*. • All organisms *use energy*. • All organisms *respond to their surroundings*. • All organisms *grow and develop*. • All organisms *reproduce*. • All organisms *produce wastes*.
Levels of Classification	*classify, classification, taxonomy, domain, Eukarya, Archaea, Bacteria*	❖ Taxonomy is the system or scientific study of how organisms are classified basing on their shared characteristics, or taxonomic keys. ❖ In classification of organisms, there are 7 major levels. From **the broadest to the most specific**, they respectively are *Domain, Kingdom, Phylum, Class, Order, Family, Genus, and Species.* ❖ Eukarya includes the familiar kingdoms of **plants**, **animals**, and **fungi**, and a less familiar kingdom, **Protista**, which has much simpler organisms. ❖ The more characteristics organisms have in common, the more closely related they are. ❖ All modern humans living today belong to the species **Homo Sapien**.
Viruses	*infect, host, vaccine, inject, isolate, disease, pathogen, resist, measles.*	❖ A virus is a tiny, nonliving particle that enters and then reproduces inside a living cell. Viruses lack most of the characteristics of living things. ❖ To reproduce, a virus attaches itself to a host cell. A host is an organism that provides a source of energy or a suitable environment for a virus to live. • Step 1: Virus injects genetic material into host cell. • Step 2: Cell makes copies of virus. • Step 3: Cell bursts, releasing many new copies of virus. ❖ A vaccine is a substance used in vaccination that consists of pathogens. Vaccination can prevent measles and other viral disease. • Step 1: The virus that cause the disease is isolated. The virus

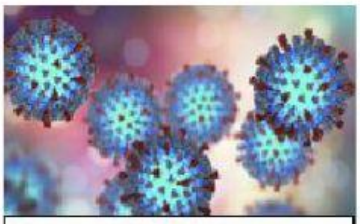
		is then damaged by heat and a vaccine prepared for it. • Step 2: After being injected with a vaccine, the body prepares defenses against the virus. • Step 3: The body can now resist infection by the disease-causing virus.
Cell Functions and Cell Theory	*perform, circulatory system, function, theory, principle, microscope.*	❖ A single cell has the same needs as an entire organism. For an organism to stay alive, it must perform biological functions. • Obtaining energy. • Bringing in water and nutrients. • Getting rid of wastes. • Reproducing new cells. ❖ As a multicellular organism, your body's cells work together to keep you alive. ❖ Principles of Cell Theory • All living things are made of cells. • Cells are the basic units of structure and function in living things. • All new cells are produced from existing cells.

PART II. PRACTICE

Task 1: Choose the correct answers.

1. Choose the picture NOT showing an organism.

A. 
Animals

B. 
Viruses

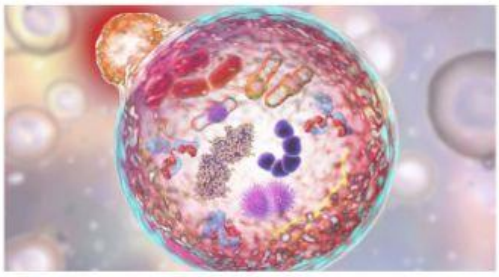
C. 
Fungi

D. 
Bacteria

2. Which of these is a unicellular organism?

A. Human B. Lemon tree C. Corona virus D. Amoeba bacteria

3. Which statement is not true about cell?



A. Cells are the unit of function in any organisms.
B. Cells need to obtain energy.
C. A new cell can only form when another dies.
D. Cells need to get rid of waste.

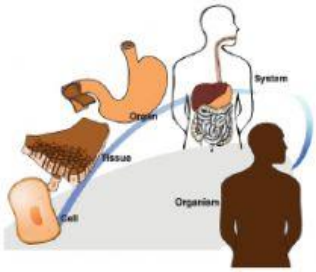
4. Which domain includes organisms that have nuclei contain DNA?

A. Bacteria
B. Archaea
C. Eukarya

5. What do you have to do if you get COVID?

A. Visit your relatives and neighbors.
B. Call your neighbors to come and help you.
C. Go for a walk to calm down yourself.
D. Isolate yourself at home.

6. How do organisms stay alive?



A. Body's cells work together to keep organisms alive.
B. Cells continuously reproduce from existing cells.
C. Organisms take in nutrients to feed the cells.
D. All of the above.

7. Which statement describes Taxonomy?

A. A scientific study of how organisms are classified.
B. A group of organisms that are classified as a unit.
C. The highest level of living thing classification
D. The lowest level of living thing classification.

8. What is the most specific level in classification of organisms?

A. Class B. Genus C. Order D. Species

9. Which is not one of principles of cell theory?

A. All living things are made of cells.
B. Cells can make their own food and get rid of them.
C. Cells are the basic units of structure and function in living things.
D. All new cells are produced from existing cells.

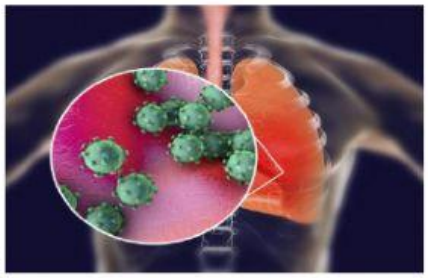
10. Which of the following is NOT true for ALL living things?

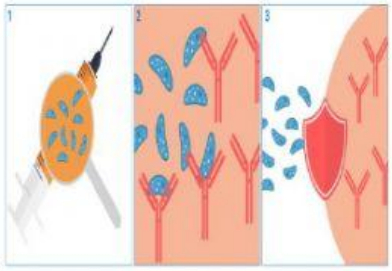
A. They must grow.
B. They must reproduce.
C. They must take in energy.
D. They must move.

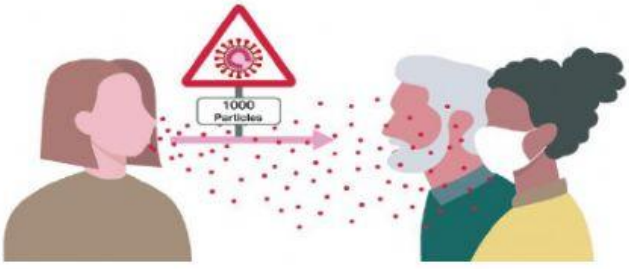
Task 2: Match the words in the box with the pictures.

A. Vaccine	B. Measles	C. To infect	D. To inject	E. Pathogen

1. 

2. 

3. 

4. 

5. 

Answer: 1. _____, 2. _____, 3. _____,

4. _____, 5. _____.

Task 3: Read and circle True or False.

1. A virus is a tiny, living particle that enters and then reproduces inside a living cell. **True/False**

2. In classification of organisms, the broadest level of organization is the Domain. **True/False**

3. The vaccines can kill all viruses. **True/False**

4. Viruses can reproduce by their own without the host's cells. **True/False**

5. All new cells are produced from dead cells. **True/False**

Task 4: Fill in the blanks with words in the box.

unicellular	cell	stimuli	pathogens	multicellular	vaccine

1. After being injected with a _____, the body prepares defenses against the virus.

2. Responding to _____ helps all organisms to survive and function.

3. A _____ is the basic unit of living things.

4. Organisms consisting of many cells are _____.

5. In a single-celled or _____ organism, one cell carries out the functions necessary to stay alive.

6. A vaccine is a substance used in vaccination that consists of _____.