

Science 8
Unit 4: Cells, Tissues, Organs and Systems
Topic 2: Characteristic Of A Living Thing

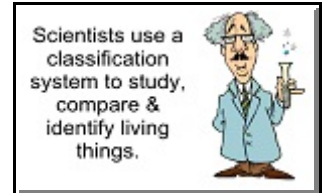


Student Name: _____

How to classifying things in your surrounding?

1) Living things: Something that is alive or having characteristics of life. There are three things that all living things can be classified as:

- animal
- plant
- micro-organism



2) Non-living: never having all the signs of life

3) Dead: refers to something that was once alive, but no longer has any signs of life.

Organism: refers to a living thing

Characteristic refers to a feature.

All living things have certain characteristics in common. Something is living if it has all of these characteristics.

Characteristics of a Living thing:

1) Growth: The characteristic of life that allows organisms to get bigger, change and repair themselves. It means more than just getting bigger.

2) Reproduction: The replacement of an old generation by a new generation.

3) Movement - Any motion or activity that changes the shape, position or location of an organism. Locomotion refers to the movement from one place to another. For example, humans use legs for locomotion.

4) Respond to the Environment : Stimuli refers to anything which causes activity or change in an organism and can be either internal or external. Some are :

- Odours
- touch
- temperature
- taste
- light

5) Made Of Cells: The tiny, living building block which makes up all living things

6) Need and Obtain Energy: Cells cannot survive on their own. They need power to stay alive. They need energy to perform functions such as growth, maintaining balance, repair, reproduction, movement and defense. This means all living organisms must obtain and use energy to live.

7) Gets rid of wastes that build up in its body

PART A: MULTIPLE CHOICE

Instructions: Shade the letter of the correct answer on the computer scorable answer sheet provided

1. All matter be classified as living, non-living and dead
 - (A) True
 - (B) False
2. Living things rely on non-living things for their survival?
 - (A) True
 - (B) False
3. What is another term for living things?
 - (A) Organ
 - (B) Organism
 - (C) Organelle
 - (D) Organization
4. Which one of the following can be considered a living thing?
 - (A) Bicycle
 - (B) Mountain
 - (C) Mushroom
 - (D) Sky
5. How many characteristics of life are there?
 - (A) 2
 - (B) 5
 - (C) 7
 - (D) 10
6. Which of the following is/are characteristic(s) of living things?
 - (A) Feeding, movement, evaporation
 - (B) Feeding, respiration, movement
 - (C) Respiration, movement, evaporation
 - (D) Respiration, feeding, evaporation
7. Which one of the following is a characteristic of all living things?
 - (A) Is warm-blooded.
 - (B) Can make a response.
 - (C) Has a brain.
 - (D) Can make its own food.
8. Which one of the following characteristics of life cannot take place in very young humans?
 - (A) Excretion
 - (B) Movement
 - (C) Nutrition
 - (D) Reproduction

9. Which one of the following characteristics involves getting rid of waste?
- (A) Nutrition
 - (B) Removal
 - (C) Excretion
 - (D) Indigestion
10. Which of the following is not a characteristic of a living thing?
- (A) Living things maintain a constant temperature.
 - (B) Living things reproduce.
 - (C) Living things respond to their environment.
 - (D) Living things must get rid of wastes.
11. What is a characteristic of living things that sets them apart from the nonliving?
- (A) Respond to a stimulus
 - (B) Grow and reproduce
 - (C) Made of cells
 - (D) All of these are characteristics of living things.
12. A cat playfully swats at a rubber hose that is dangled in front of it. To the cat, the dangling rubber hose can be considered
- (A) An environment
 - (B) A condition
 - (C) A stimulus
 - (D) A response
13. Which one of the seven characteristics of living things is involved when a rabbit runs away from a fox?
- (A) Growth
 - (B) Movement
 - (C) Reproduction
 - (D) Response
14. The reaction to a stimulus by a living organism is called
- (A) Movement
 - (B) Obtain Energy
 - (C) Response
 - (D) Respiration
15. Which one of the seven characteristics of living things is involved when an organism gets bigger?
- (A) Growth
 - (B) Movement
 - (C) Reproduction
 - (D) Response
16. The ability of a living organism to change its location is called
- (A) Growth
 - (B) Movement
 - (C) Reproduction
 - (D) Response

PART D: WRITTEN RESPONSE

1. List five characteristics of a living thing and give an answer:

Characteristics of a Living Thing	Example

2. You are exploring a remote region in Labrador. You unexpectedly discover what may be a new microscopic life form in a sample of pond water. How could you determine if this sample is living or non-living?

3. You observe several puffins eating herring along a coastline. How do the puffins demonstrate the characteristics of living things discussed in this chapter? If they do not, can you still say they are alive? Explain your answer.
