

## LIVING SCIENCE CLASS6 SOLUTION CHAPTER.7 LIVING AND NON-LIVING

P 69 Oral Questions For Formative Assessment

1. Both are made up of matter; both are made up of structural units.
2. The structural unit of non-living thing is a molecules but the structural unit of living thing is the cell.

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1. a plant; a car                      2. a. bird, human      b. yeast, Amoeba
3. In crystal, growth occurs due to addition of material from the outside. Growth in our body occurs by the division of the cells.
4. Upwards, downwards, response to stimuli
5. Produces energy.

P. 73 For Formative and Summative Assessment

A. 1. c 2.c 3.c 4.c 5. a 6. a 7. d 8. a

B. 1. false 2. plants 3. excretion 4. energy 5. Amoeba 6. species 7. false

C. 1. Animals move around in search of food or shelter and also to escape from enemies. 2. The plant sunflower moves as it turns to face the sun.

3. Cells are the structural and functional units of living things. Yes, all living things are made up of cells.

4. Unicellular organisms grow only in size of their cells.

5 The leaves of the Mimosa plant droop if we touch it. Touch is the stimulus while folding of the leaves is the response.

6. Autotrophs make their food themselves while heterotrophs depend on others for their food. 7. Oxygen is the primary need of all organisms. Living organisms respire all the time. The oxygen breathed in combines with the food and produces energy. We need energy to stay alive. 8. Urine, sweat and carbon dioxide are three waste products that we excrete.

D. 1 All living things are able to respond to stimuli in the external environment. For example, when our hand comes too close to a hot object we pull our hand away from the hot object.

2. Growth in living things occurs within the organism by the division of cells. The growth of living things is different from the growth of non-living things because in non-living things growth occurs due to addition of material from the outside.

3. Some living things give birth to babies (like dogs), some lay eggs from which the young ones hatch or produce (like birds) and many plants are produced from seeds or spores.
- 4 (i) Lungs: Most of the mammals breathe through their lungs, for example humans
- (ii) Skin: The earthworm breathes through its skin.
- (iii) Holes: The cockroach breathes through several holes in its body.
- (iv) Gills: Fish breathe the oxygen dissolved in water through their gills.
5. Plant tends to bend towards the direction from where the light is coming in. This is called phototropism. Roots tend to grow towards the earth and stems grow against it. This is called geotropism. Animals also show response to light, for example, cockroach and earthworm move away from light.
6. A species is a group of similar living organisms that have similar body parts, live in the same habitat, eat the same kind of food and reproduce among themselves.

#### HOTS Questions

1. Respiration in plants takes place day and night whereas photosynthesis only takes place during the day. During the day, the amount of oxygen given out by them in photosynthesis is more than the amount of oxygen used up in respiration. So, during the day, plants supply oxygen to air.
2. Because it does not grow or reproduce.
3. Matter occupies space and has mass. All living things have mass and occupy space. Hence, living things are matter.
4. The prey-predator relationships among animals in jungles keep a check on their population. Also animals do not have health facilities as they are available to the human population.
5. Because all the characteristic functions of a living being are carried out by a cell. If a cell is broken up into its different constituent molecules, each part will die. Hence the cell is the smallest structure that can exhibit life.