

GRADE -5 BIOLOGY

CH-2 LESSON -1

What is inside a cell?


01/11/2020

Q1. What is the most basic unit of living things?

A1. Cell is the basic unit of life. Cells are the smallest living parts of any living thing. Cells have the same needs as any organism and carry out many of the same activities. Cell contain smaller parts each with a specialized job.

Q2. Write the differences between plant cell and animal cell.

A2. PLANT CELLS

1. Have cellulose cell walls.
2. Have chloroplast.
3. Always have a vacuole.
4. Have a few different shapes.
5. Stored food is mainly starch.

ANIMAL CELLS

1. Do not have cellulose cell wall.
2. Do not have chloroplasts.
3. Sometimes have a vacuole.
4. Have many different shapes.
5. Stored food is mainly glycogen.

Q3. List five parts of all cells and their jobs.

A3. 1. **Nucleus**: A nucleus contain chromosomes made of DNA, which contains instructions. It is necessary for each cell to do its job.

2. **Mitochondria**: It produces energy by processing oxygen and food.
3. **Cell membrane**: It holds parts of the cells together and allows certain substances in and out.
4. **Cytoplasm**: The cytoplasm hold all the materials between the cell membrane and the nucleus.
5. **Vacuole**: The vacuole may store or break food, in plant cells it stores water.

Q4. What is DNA?

A4. DNA (Deoxyribonucleic acid) is a chemical, shaped like a twisted ladder. It contains the genetic information of cells.

Q5. What is cellular respiration?

A5. Cells combine oxygen and food to get energy .This process is called cellular respiration.

Fill in the blanks.

1. **Chloroplasts** give plants their green colour.
2. Almost every cell nucleus in our body has 46 chromosomes.
3. Every chromosomes have small section of DNA called genes.
4. **Cells** contain smaller parts each with a specialized job.
5. **Heredity** is the process of passing genes from one generation to next.

Grade-5

Biology

Ch-2 Lesson-2



01/11/2020

How do cells work together?

Q1. How are cells, tissues, organs and systems related?

A1. All living things are made up of cells. Cells in our body form tissues. A tissue is a group of same kind of cells. An organ is a group of different tissues that work together to form a certain job. Systems are group of organs that work together.

Q2. What are cilia and what do they do?

A2. In the airways of the lungs, cells have waving hair like structures called cilia. They sweep dirt and germs out of the airways.

Q3. Name and explain different cell structures and their functions.

A1. 1) **Branching cells:** The shape of nerve cells make them great for communicating signals between the brain and rest of the body.

2) **Flat cells:** Skin cells often join or overlap to cover a surface making it both strong and flexible.

3) **Round cells:** Red blood cells are round with two big dimples. Their job is to carry oxygen to all your cells.

Q4. Describe about the largest organ in our body.

A4. i) Skin is the largest organ in our body.

ii) It has multiple tissues that work together.

iii) It protects our internal organs.

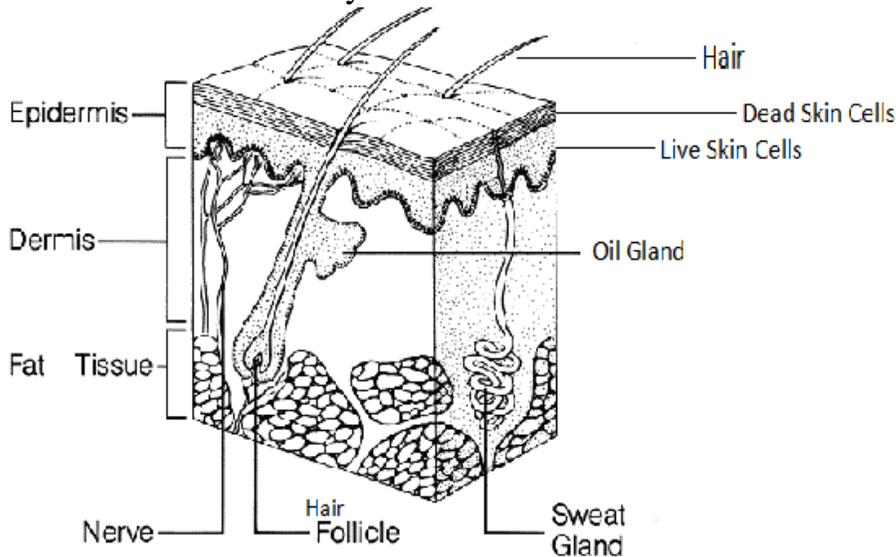
iv) Keeps out germs and prevents great water loss.

Q5. Describe about sweat glands.

A5. Sweat glands are tissues in our skin. Sweat leaves the glands through tiny openings on the surface of our skin called sweat pores.

Sweat carries some waste products from cells. When sweat evaporates from the skin it carries heat away from the body.

Q6. Draw and label the layers of skin.



Fill in the blanks.

1. Oil glands keep the skin soft.
2. Muscle cells have long fibers made of proteins.
3. Hair forms in the cells at the bottom of hair follicles.
4. Skin cells are flat and made of many layers.
5. Stems, leaves, roots and flowers are plant's organs.
6. Hair that we outside the body is a dead tissue.