

You Are Growing

Traits

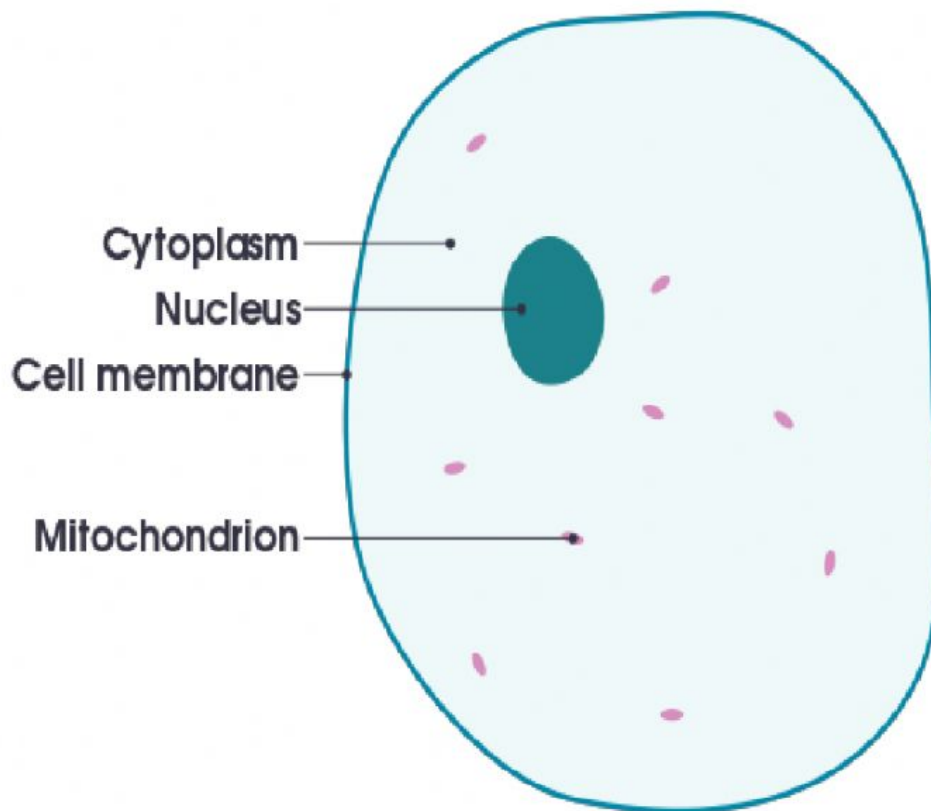
Think of some physical qualities that describe you. You may have red hair like your mother. Your nose may look like your father's. These qualities are examples of traits. A trait is a characteristic, or quality that you have. You may also have blue eyes like your grandmother's. She may have passed that trait on to your father, who passed it on to you. Characteristics passed on to you from your parents in this way are called inherited traits.

The instructions for your inherited traits are contained within each of your body cells. A cell is the smallest working part of your body. Some inherited trait affect the way your body works. Other traits affect how you look. Some traits are not inherited. Your acquired traits are characteristics you develop as a result of your life experiences. For example you might like to take care of dogs. Your parents might like dogs too. But this trait was not passed to you through your parents' cells. You developed an interest in dogs after you were born. You might enjoy skate boarding, reading, or belonging to a club. Acquired traits may change as your interests change. Inherited traits do not change simply because your interests change.

Some traits may be born inherited and acquired. For example you might be good at playing a musical instrument. You inherited a musical ability. You have become a skilled player because you have practiced. You practiced because you acquired the interest. No two persons are exactly alike. Together your interests, skills and talents make you a unique person.

Activities of Cells

All living things are made up of cells. Cells take in food and get rid of waste, they grow, multiply and die. The cells that make up your body come in many different shapes and sizes. You grew from a single cell which divided to make two cells. The process has continued and now your body has trillions of cells. Your body's cells will continue to divide making you grow and replace worn out cells. You can see parts of a cell in the diagram below.



Most cells are so small that you can see them only through a microscope.

The **nucleus** is the cell's control center. It tells the cell when and how to do its jobs. The nucleus also contains your inherited traits.

The **cytoplasm** is a jellylike fluid inside the cell. It contains many parts of the cell, including the nucleus.

The **cell membrane** holds a cell together. It also controls what goes into and out of the cell.

A group of cells that work together to do a job in the body is called **tissue**. Groups of tissue join together to form **organs**. Each organ has a job to do. For example your heart is an organ made mostly of **muscle tissue**. It pumps blood through your body. Other organs include your stomach, lungs, and brain. Sometimes several organs work together to do a job. Groups of organs that work together is called a **system**. Your brain, nerves, and spinal cord make up your **nervous system**. Together, they send and receive messages throughout your body.

Name: _____

Date: _____

A. Choose the correct answer.

1. What is the control center of the cell called?
 - (a) nucleus
 - (b) cytoplasm
 - (c) cell membrane
2. What is a group of cells that work together called?
 - (a) system
 - (b) organ
 - (c) tissue

Write true or false.

3. The cytoplasm is a jellylike fluid inside the cell. _____
4. All living things are made up of organs. _____
5. Acquired traits are traits you develop as a result of your life experiences.

B. Use a word from below to fill in the blanks.

(1 pt.)

talents	cell	traits
----------------	-------------	---------------

6. A _____ is the smallest working part of your body.
7. Inherited _____ are characteristics passed on to you from your parents.
8. Your interests, skills and _____ make you a unique person.

C. Answer the following questions.

9. What are groups of organs that work together called?
10. What are **two** things living things do?