

# CHARACTERISTICS OF LIVING THINGS: WHAT IS LIFE?

## 1. Living things are made of cells

All living things are made up of cells. These cells are the basic building blocks of life. As an example, have you ever seen a sandcastle? At a distance, the sandcastle looks like a smooth brown building. As you get closer to the sandcastle, you can begin to see that it is not one smooth building, but instead that it is made up of millions of tiny grains of sand.

Cells are tiny units of living materials separated by a cellular wall, or barrier. These cells are so small, that they can only be seen with a powerful tool known as a microscope. Cells make up every part of a living thing. Your skin, your hair, fingernails, blood, bones, nerves, and muscles are all made up of cells. These cells work together to keep the life form alive.

## 2. Living Things Can Move

“HEADS UP!!!” When you hear someone yell a phrase such as “heads up”, or “duck”, what do you do? If you are like most of us, you move out of the way, and quickly. You might move to avoid danger, to walk, run, play, or eat. You even move in your sleep.

Animals move in many different ways. They might use fins to push them through the water, wings to help them fly, paws and tails to help them move on land. Plants also move. They of course cannot move as well as animals, but many plants move their stems to face the Sun, open and close flowers, and more. Some carnivorous plants even move to trap prey.

## 3. Living Things Grow

What would you like to be when you grow up? Well, first you must eat a lot of food and get your rest. These things are necessary for your body to grow. Like you, other living things also grow. Almost all living things start their lives as smaller infant-like creatures. Over a period of time, they grow and develop into adults.

## 4. Living Things Respond To The Environment Around Them

One of the most important characteristics of living things is that they respond to the environment around them. This one single characteristic makes them very different from non-living things, which do not respond to the environment, but instead just let whatever happens to them happen.

Your own body responds to its environment in order to keep you healthy. You might sneeze to keep dust and germs from entering through your nose, your immune system responds to invaders by producing antibodies, etc. Now consider a non-living thing. If a bear invades a cave, can the cave sneeze to get it out? Does the cave produce antibodies to attack the bear? You can see why this ability is so unique and important to living things.

## 5. Living Things Reproduce

A very important part of the life of living things is the ability and opportunity to reproduce, to create offspring. Reproduction is the process of one or more living things creating another living thing. By reproducing, living things are able to pass on their characteristics to another generation.

## 6. Living Things Die

Anything that is alive will eventually die. The period of time that something is expected to live is called the living thing's “lifespan.” The lifespan of living things can vary significantly.

Some things have a lifespan of only a few hours or a couple of days. Some bacteria and insects, for example, begin their lives, mature, reproduce, and then die, all within a couple hours. Other living things can live for many years, such as an elephant that might live for 70 years, and a human which can live for 100 years. Then there are the living things that seem to live forever. A bristlecone pine tree can live 5,500 years.

Feeding on other animals

# Science in the News #7

Name: \_\_\_\_\_

Period: \_\_\_\_\_

1. Read and 'talk' with the text on the back of this page

2. Complete all of the sentences below



The article that I just read is about \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**To 'talk' with the text on back:**

1. underline : important facts
2. ☆ : interesting ideas
3. ○ : vocabulary
4. ? : What you want to know more/ don't



I think I am reading this article because in \_\_\_\_\_ class(s) we are/were studying \_\_\_\_\_



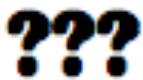
One word from the article I would like to know more about is \_\_\_\_\_. When I looked this word up in the dictionary I find out it meant \_\_\_\_\_



The most important sentence in the article to me is " \_\_\_\_\_ "

because \_\_\_\_\_

If I wanted to tweet about this article, my 120 characters (or less) would be \_\_\_\_\_

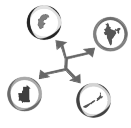


After reading the article I wonder \_\_\_\_\_?

Another question I still have after reading the article is \_\_\_\_\_



summarizing



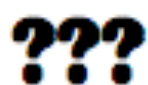
making connections



Research



Important details



questioning