

# Characteristics of Living Things

# Definition

Stimulus Anything that causes a living thing to respond

Examples If it is hot outside I will sweat, heat is the stimulus.

If I tell my dog to sit, my command is the stimulus.

Living things have ALL five of these characteristics:

1. They respond to their environment
2. They need energy
3. They grow
4. They reproduce
5. They get rid of waste

Some non-living things have a few of these characteristics, but only living things have all five.

- Read page 10
- “Characteristics of living things” assignment

# Maple Tree

## **Responds to environment:**

Drops leaves in winter

## **Needs energy:**

Sunlight

## **Grows:**

Up to 2 feet per year

## **Reproduces:**

Drops seed pods which catch in the wind.

## **Expels Waste:**

Oxygen



# Escherichia coli

## **Responds to environment:**

Swim towards food

## **Needs energy:**

Nutrients in your stomach

## **Grows:**

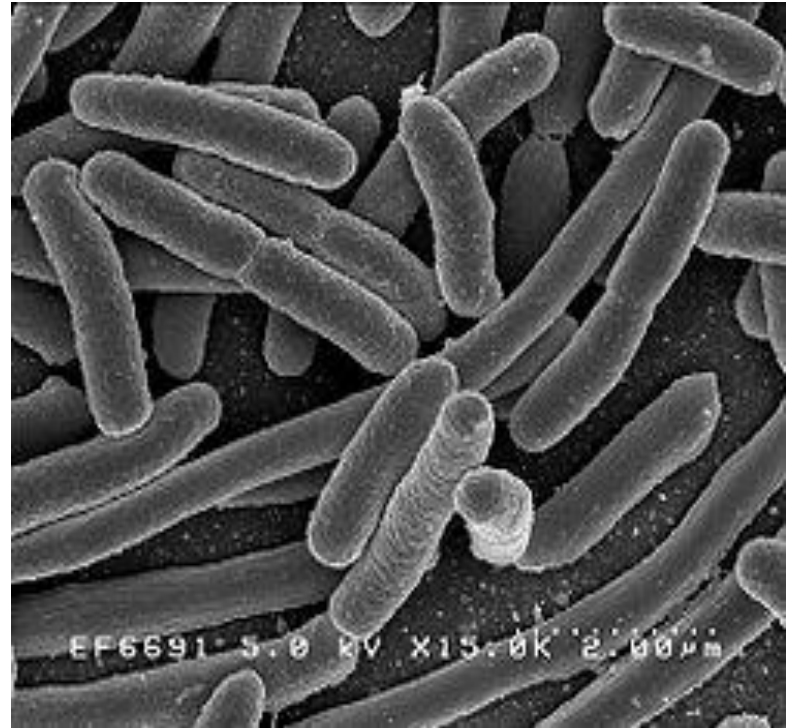
Grows until it has enough material to split (as little as 20 min)

## **Reproduces:**

Binary Fission (one cell splits into two)

## **Expels Waste:**

Vitamin K



# Morel Mushroom

## **Responds to environment:**

Grows much more after a forest fire.

## **Needs energy:**

Dead plants

## **Grows:**

Mostly underground

## **Reproduces:**

By spores

## **Expels Waste:**

Composted soil



# Tiger

## **Responds to environment:**

Hunts

## **Needs energy:**

Other animals, Oxygen, Water

## **Grows:**

From a cub into a full grown cat.

## **Reproduces:**

Sexually

## **Expels Waste:**

Feces, Urine, Carbon Dioxide

