

# What are Living Things?

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

Date: \_\_\_\_\_

## What Are Living Things?

- Genesis 2:7 records how God “formed man of \_\_\_\_\_ from the \_\_\_\_\_.”
- It is interesting that both people and dirt contain a number of the same \_\_\_\_\_.
- \_\_\_\_\_, Carbon, \_\_\_\_\_, Nitrogen
- The same verse explains that man became “a living being” only after God \_\_\_\_\_ into him the breath of \_\_\_\_\_.
- Even if scientists \_\_\_\_\_ all the right elements, they cannot turn them into something \_\_\_\_\_.

## Signs of Life: Organisms

- How can studying living things help us better \_\_\_\_\_ God’s Creation?
- Through their studies, scientists have learned that all living things, or \_\_\_\_\_, have certain characteristics in common.
- Characteristics of life include:
  - Is made up of \_\_\_\_\_
  - \_\_\_\_\_ and \_\_\_\_\_
  - Uses \_\_\_\_\_
  - Responds to \_\_\_\_\_

## Signs of Life: All Living Things are Made Up of Cells

- The \_\_\_\_\_ is the basic unit that makes up all living things.
- Because cells are so small, we need \_\_\_\_\_ to study their parts.
- Most organisms on Earth are \_\_\_\_\_.
- A \_\_\_\_\_ is made up of one cell.
- Bacteria and \_\_\_\_\_ are examples of unicellular organisms.
- \_\_\_\_\_ are made up of more than one cell.
- \_\_\_\_\_, \_\_\_\_\_, and fungi are examples of multicellular organisms.

- God designed the cells of multicellular organism to be \_\_\_\_\_.
- Specialized cells do jobs that \_\_\_\_\_ be done by other cells.
- In animals, some cells become \_\_\_\_\_ cells or \_\_\_\_\_ cells.
- In plants, cells are found in \_\_\_\_\_, stems, and \_\_\_\_\_.
- Complex \_\_\_\_\_ inside each cell directs that cell to carry out its \_\_\_\_\_ job.

### Signs of Life: Living things Grow and Develop

- All living organisms go through \_\_\_\_\_ in their life cycle.
- As organisms go through their life cycle, they \_\_\_\_\_.
- Unicellular organism grow because they take in \_\_\_\_\_ and \_\_\_\_\_.
- Multicellular organisms grow because their cells \_\_\_\_\_ and increase in \_\_\_\_\_.
- As organism grow, they also \_\_\_\_\_, or change and mature.

### Signs of Life: Living Things Reproduce

- \_\_\_\_\_ is the process in which organisms produce new organisms or offspring that are like themselves.
- Unicellular organisms simply \_\_\_\_\_ themselves and then \_\_\_\_\_, making two identical single-celled individuals.
- Many multicellular organisms produces special reproductive cells called \_\_\_\_\_ and \_\_\_\_\_.
- In sexual reproduction, \_\_\_\_\_ is the process in which an egg cell and sperm cell join.
- When an egg is fertilized, a new \_\_\_\_\_ is produced.
- Plants often demonstrate \_\_\_\_\_ reproduction, such as budding and spores.
- When an organism reproduces, it passes its \_\_\_\_\_ on to its \_\_\_\_\_.
- Traits are \_\_\_\_\_ such as eye color, hair or fur color, hair or fur patterns such as stripes or spots, tooth or beak shape, and bone size.
- When an organism, they ensure that their species will \_\_\_\_\_ to exist on Earth.

### Scripture Spotlight

- Read **Genesis 6:19-21**. Why did God send animals by pairs into the ark?

### Signs of Life: Living Things Use Resources

- \_\_\_\_\_ is vital to living things.
- More than \_\_\_\_\_ of a cell is water.
- What might happen to a cell that did not get enough water?
- Organisms also need \_\_\_\_\_ to carry on the activities in their cells.
- How do organisms obtain energy?
- What do green plants do with the Sun's energy?
- In animals do not get energy in the same way as plants, where do they get their energy?
- Resources include \_\_\_\_\_ than just water and energy supplies.
- Like humans, animals also need space to \_\_\_\_\_, materials to build their \_\_\_\_\_, and clean \_\_\_\_\_ and water.
- Every living thing in an area must \_\_\_\_\_ for the resources that are available.
- In a resource runs out, what must an animal do in order to survive?

### Scripture Spotlight

- *What kind of resources does 1 Peter 2:1-3 recommend for growing Christians?*

### Signs of Life: Living Things Move & Respond to Stimuli

- As conditions in the environment \_\_\_\_\_, living things must \_\_\_\_\_ to ensure their survival.
- Something that causes a living thing to change is called a \_\_\_\_\_ (plural *stimuli*).
- Living things can \_\_\_\_\_ react to a stimulus, like the involuntary response of your leg kicking when the knee is tapped.

- Living things are also capable to self-initiated or \_\_\_\_\_ movement, such as your turning the page of your book when you reach the bottom.
- What are some ways God designed animals to adapt to changes in their surroundings?
- Why do you think God gave living organisms the ability to respond to stimuli?
- It might be easy to see how animals \_\_\_\_\_ to changes in the environment.
- But how do plants respond to changes?
- God designed plants to grow \_\_\_\_\_ the resources they need.
- Plants \_\_\_\_\_ to light, gravity, and water in their environment.
- Plant leaves will \_\_\_\_\_ toward light so that they can get the energy they need for \_\_\_\_\_.
- Roots grow \_\_\_\_\_ because of \_\_\_\_\_, but they also grow toward water.
- Some plants have leaves or flowers that will \_\_\_\_\_ when touched.
- Plant stems grow \_\_\_\_\_ to support the leaves.

#### Signs of Life: Keeping Body Systems Stable

- God designed humans, plants, and animals to \_\_\_\_\_ in order to keep their body systems stable.
- How does your body respond to your environment?
- What happens when you get hot or cold?
- These kinds of responses are handled in your body \_\_\_\_\_.
- Most living things are able to respond \_\_\_\_\_ to stimuli around them by regulating their body systems through a process called \_\_\_\_\_.
- Homeostasis maintains the body's \_\_\_\_\_ by regulating things like temperature, carbon dioxide, and concentrations of nutrients and wastes.
- Most animals are also \_\_\_\_\_ with bodies equipped to deal with environmental \_\_\_\_\_ such as heat, cold, and lack of water.
- God gifted some animals with body parts that enable them to cope with \_\_\_\_\_.