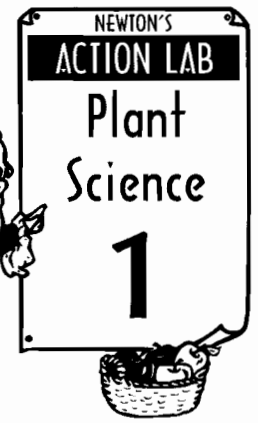


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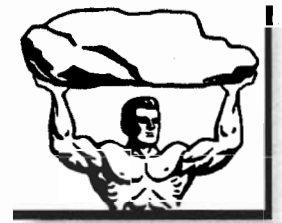
# It Is Not Easy to Be Alive



## Dr. Newton Explains Life

Being alive is very complicated. Living things have to grow, change, reproduce and respond to the environment. Living things have a recognizable size and shape. Living things have a normal life span.

A rock does not have a normal life span. A snowflake has a recognizable size and shape, but it isn't alive. A flag responds to a breeze, but it isn't alive. You don't expect an announcement from your Ford truck that it has given birth to a compact car. Your small TV will never grow into a giant screen.



## Crossword Puzzle: The Main Words of Life

Every word in this crossword puzzle tells what living things can do. They describe what you, a mouse and a tree must do to stay alive.

### Down

1. Word that means that living things do not stay still.
2. The favorite liquid of all living things.
4. What you do after a stimulus from the environment such as a loud noise.
6. A five-letter word that describes what living things eliminate.
7. Auto mechanics do this to cars that don't work. Your body can do this by itself.

### Across

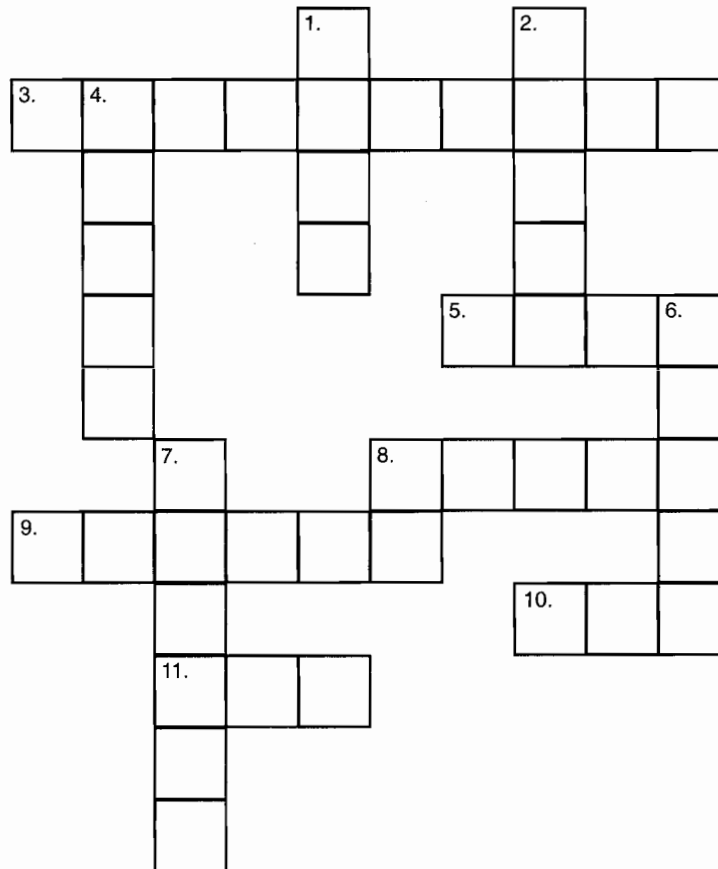
3. The basic material inside all plant and animal cells.
5. What living things must do to become bigger.
8. The basic building blocks of all plants and animals.

# It Is Not Easy to Be Alive

Name \_\_\_\_\_

9. Food provides what you need to move and keep warm.
10. What all living things do at the end of their life.
11. Your lungs help you take this into your body.

## ALIVENESS CROSSWORD PUZZLE



## Candle "Life"

Living things have certain needs that nonliving things do not. They must take in **food** for energy and for building cells. They must take in **air** to burn the food to meet their energy needs. **Water** must move in and out of plants and animals. An apple tree may pass 1800 gallons of water through itself in one growing season. **Waste** materials must be eliminated from living things.

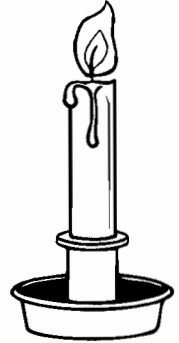
You probably would have little difficulty deciding which things around you are alive or are not alive. Yet a common candle may surprise you by having many life characteristics. Can a candle pass an "aliveness" test?

# It Is Not Easy to Be Alive

Name \_\_\_\_\_

**Caution!** Have an adult light your candle. You are not to use matches. Use a large kitchen size candle placed in a stable base.

1. Have an adult light your candle. Observe all safety precautions. Living things move. What part of your candle is moving? \_\_\_\_\_
2. Living things need food. What part of the candle is being "eaten" or used up? \_\_\_\_\_
3. Living things react to the world around them. Snap your fingers or clap your hands near the flame. How does your candle react to a change in its world? \_\_\_\_\_
4. Living things have a definite size and shape. Why does your candle pass this part of the aliveness test? \_\_\_\_\_
5. Living things need water. What would water do to the candle flame? \_\_\_\_\_
6. Living things grow. Does your candle pass this part of the aliveness test? \_\_\_\_\_
7. Living things repair themselves. Does your candle pass this part of the aliveness test? \_\_\_\_\_



## More Candle Experiments

Living things need air, give off waste and eventually die. Let's try all these aliveness tests on the candle at the same time.

1. **Carefully** place a jar over a burning candle and observe the results. Why do you think the candle "died" out? \_\_\_\_\_
2. Observe the cloudiness on the inside of the jar. Run your fingers inside the jar where the cloudiness is. What is the cloudy substance? \_\_\_\_\_

