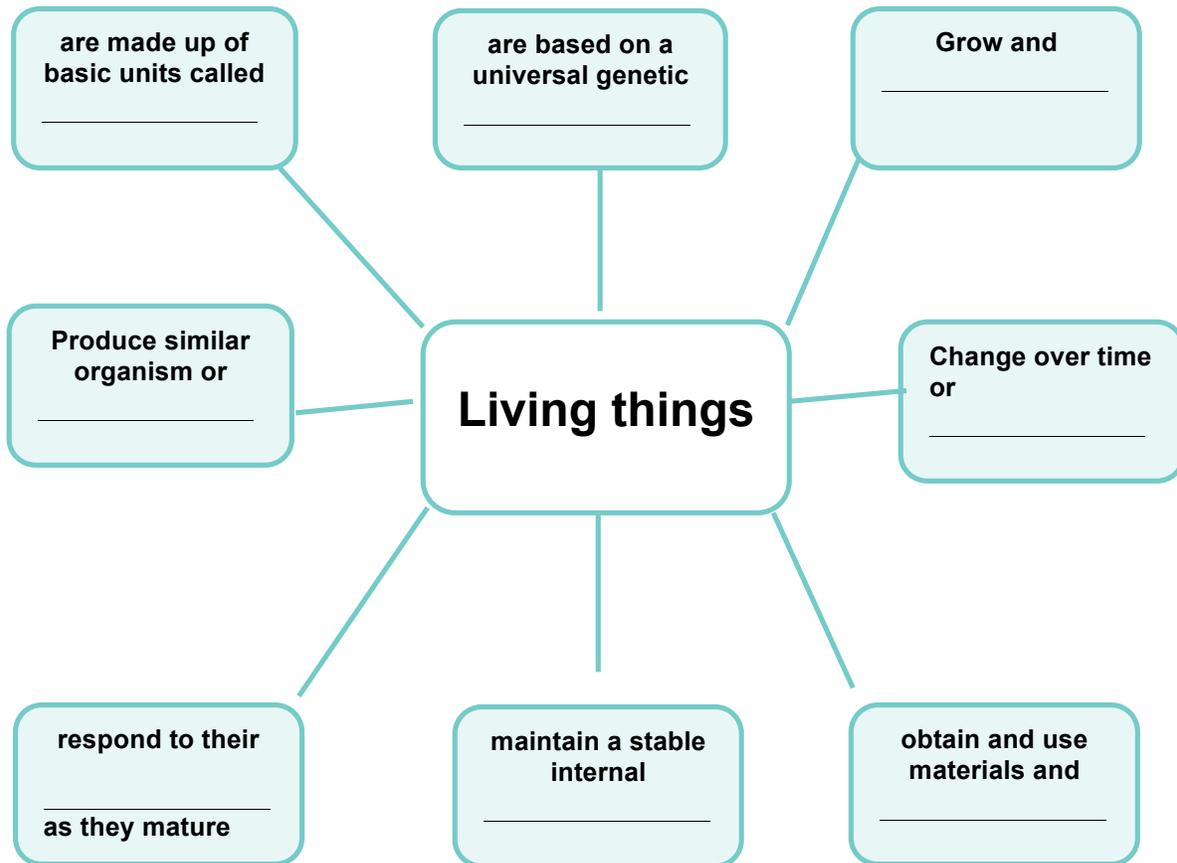


# 1.3 Studying Life

**Characteristics of Living Things** **Biology** is the study of life. Living things share these characteristics: They are made of cells and have a universal genetic code; they obtain and use materials and energy to grow and develop; they reproduce; they respond to signals in their environment (**stimuli**) and maintain a stable internal environment; they change over time.

## Characteristics of Living Things

1. Complete the graphic organizer to show the characteristics living things share.



- The genetic molecule common to all living things is \_\_\_\_\_.
- The internal process of \_\_\_\_\_ enables living things to survive changing conditions.
- Living things are capable of responding to different types of \_\_\_\_\_.
- Living things have a long history of \_\_\_\_\_ change.
- The continuation of life depends of both \_\_\_\_\_ and \_\_\_\_\_.
- The combination of chemical reactions that make up an organism's \_\_\_\_\_ help to organize raw materials into living matter.

## Big Ideas in Biology

8. Complete the table of Big Ideas in Biology. The first row is filled in for you.

Big Idea	Description
Cellular basis of life	Living things are made of cells.
Information and heredity	
	Life requires matter that provides raw materials, nutrients, and energy.
Growth, development, and reproduction	
	Living things maintain a relatively stable internal environment.
Evolution	
	Each major group of organisms has evolved structures that make particular functions possible.
	All living things are fundamentally similar at the molecular level.
	All forms of life on Earth are connected into a biosphere—a living planet.
Science as a way of knowing	

9. Pick two of the big ideas from the chart and describe how the ideas interlock.

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