

Chapter 2 The Nature of Living Things

Section Review 2-1

Characteristics of Organisms

Part A: Complete Table 1 by writing *yes* if the object has the characteristic of life and *no* if it does not have the characteristic. In the last column, write *yes* if the object is living and *no* if it is not alive.

Table 1

	One or More Cells	Uses Energy	Response or Movement	Adapted to Environment	Reproduces	Grows & Develops	Living?
1. Oak tree							
2. Candle							
3. Car							
4. Turtle							
5. Clock							
6. Bacteria							
7. Robot							
8. Cockroach							
9. Icicle							

Part B: Identify the stimulus and the response for each of the following. Write your answers in the spaces provided.

1. You touch a mimosa plant and its leaves curl up.

Stimulus _____ Response _____

2. When you go from a light room into a dark room, your pupils get bigger to let more light into your eyes.

Stimulus _____ Response _____

3. Many flowers open during the day and close at night.

Stimulus _____ Response _____

4. In some people sneezing is an allergic reaction to pollen.

Stimulus _____ Response _____

5. Buds often fluff up their feathers when the weather is very cold.

Stimulus _____ Response _____

Part C: Classify each of the following as asexual reproduction or sexual reproduction. Write A for asexual reproduction and S for sexual reproduction in the spaces provided.

- 1. A housefly lays 100 eggs and each hatches into a larva.
- 2. You slice a piece of potato from a potato, and try to root it in a glass of water.
- 3. A bacteria divides in half by a process called binary fission.
- 4. A cat gives birth to a litter of 6 kittens. Each kitten looks different.
- 5. A fisher cuts up a starfish and throws the parts back into the ocean. Soon, there are as many starfish as parts that the fisher threw back.

Part D: Answer the following questions.

1. What is the difference between a unicellular organism and a multicellular organism? _____

2. Explain how you could show that frogs do not form from mud by spontaneous generation. _____

3. What is the difference between an organism's life span and its life cycle? _____

4. What characteristic of life did the research of Redi and Pasteur support? _____

5. Which characteristic of life do you think is the *best* to use to classify an object as living or nonliving? Explain your answer.

