

# Critical Thinking Activity



## Learning: Principles and Applications

### Comparing and Contrasting

**Directions:** Read the two training scenarios below. Then compare and contrast positive and negative reinforcement as a way of training animals by completing the table below, and answering the question that follows in the space provided.

#### Scenario 1

A killer whale calf living at a marine park is being trained to perform for the park's visitors. The trainer decides to rub the calf's nose as a positive reinforcer. (The calf likes to have its nose rubbed.) The trainers then set a desired goal. They want the calf to leap from the water to ring a bell. The trainers place the bell in the water and give a positive reinforcer each time the calf brushes against the bell. The bell is then raised just out of the water, and the calf receives the positive

reinforcer for raising its head out of the water to touch the bell. At first, the calf may ignore the bell or refuse to perform the action frequently. As the calf receives positive reinforcement for its behavior, however, the behavior becomes more frequent. Slowly, the bell is raised farther out of the water so that the calf must propel itself higher out of the water. In a fairly short period of regular training sessions, the calf has learned a skill that delights the crowd.

#### Scenario 2

Your family recently purchased a golden retriever puppy. Although you walk the dog twice a day, he still has abundant energy. Occasionally, he gets out and runs through the neighborhood. Your neighbors do not like him running across their landscaping. You want your puppy to get the exercise he needs, but you also want to maintain a good relationship with your neighbors. You decide to install an electronic wire system around your yard. Your puppy will wear a small battery-operated device on his collar. Each time he

gets within five feet of the wire, the battery-operated device will give him a noticeable shock. The shock will continue until he backs away from the edge of the property. Initially, the shock will be fairly strong so that it cannot be ignored. The shock is not, however, strong enough to cause permanent damage to your puppy. Once the puppy has learned the boundaries of your yard, the battery-operated device can be reset to provide only a mild shock as a reminder.

	Scenario 1	Scenario 2
1. What type of reinforcement is being used?		
2. How effective is the method of reinforcement?		
3. What similar types of reinforcers are commonly used?		
4. What other types of behaviors could be trained with this method?		

**5. Analyzing** Which type of reinforcement do you think would be most effective in helping students study? Why?

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