

## Exercises on Classical Conditioning

You will have two tasks to perform in your groups:

1. identify the US, CS, UR, and CR in each description provided below.
2. generate a list of instances of classical conditioning that you have observed or experienced in your everyday life. Each person should contribute at least one example. These instances should not be examples presented in your text or internet exercises.

The group with the greatest number of correct answers and the greatest number of everyday instances of classical conditioning will earn 3 points.

As always, elect a recorder who will post the group's answers to the "Classical conditioning" discussion forum in WebCT.

Recorder, use the following format for posting your group's answers:

Group name:

Members present

Scenario 1	US –
	UR -
	CS –
	CR –

Real world examples of classical conditioning

Student name: Brief description of the real world example.

For each scenario presented below, identify the four major elements of classical conditioning. Specify the unconditioned stimulus (US), the unconditioned response (UR), the conditioned stimulus (CS), and the conditioned response (CR).

1. To discourage coyotes from attacking their sheep, ranchers feed the coyotes small pieces of mutton tainted with poison that, when ingested, cause the coyotes to experience extreme dizziness and nausea. Later, when the coyotes are placed in the pen with the sheep, the mere smell of the sheep causes the coyotes to run frantically away from their former prey.
2. As part of a new and intriguing line of research in behavioral medicine, researchers give mice saccharine-flavored water (a sweet substance that mice love) and then follow it up with an injection of a drug that weakens the mice's immune systems. Later, when these mice drank saccharine-flavored water, they showed signs of a weakened immune response. Research is currently underway to see if the reverse is possible (i.e., if conditioning can be used to increase immune functioning), a discovery which would surely have important implications for medical treatments.
3. A passenger on a plane was feeling anxious about an important job interview the next morning, and as a result he was uneasy and nervous throughout the flight. Back at home weeks later, he is contemplating a holiday trip. Though he hasn't previously been afraid to fly, he finds himself suddenly nervous about flying and decided to cancel his plans to visit an out-of-state relative.
4. It's no secret that people become unhappy when bad weather strikes, but what is surprising is that weather forecasters are consistently blamed for weather over which they obviously have no control. Weather forecasters around the country have been whacked by old ladies with umbrellas, pelted with snowballs, and even threatened with death (e.g., 'You're the one that sent that tornado and tore up my house... I'm going to take your head off!', or 'If it snows over the holidays, you won't live to see the new year.') by people who mistakenly infer a causal relationship between the forecaster with subsequent foul weather.
5. Why is it that automobile advertisements – especially those for sports cars— often feature beautiful young women? Because smart advertisers know (and research confirms) that new car ads that include an attractive female are rated by men as faster, more appealing, better-designed, and more desirable than similar ads that do not include an attractive female.

Ader, R., & Cohen, N. (1985). CNS-immune system interactions: Conditioning phenomena. *Behavioral and Brain Sciences*, 8, 379, 94. [Example 2]

Cialdini, R.B. (1993). *Influence: Science and practice* (3<sup>rd</sup> ed.). New York: Harper Collins. [Examples 4 & 5]

Garcia, J., Hawkins, W., & Rusniak (1974). Coyote predation control by aversive conditioning. *Science*, 184, 581-83. [Example 1].