Name	Class	Date
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# **Classical Conditioning Worksheet**



**Directions:** In these examples, classical conditioning is outlined in the following paragraphs. In each example, identify the unconditioned stimulus, unconditioned response, conditioned stimulus, and the conditioned response.

- 1. Start by figuring out the NATURALLY OCCURRING, UNLEARNED, BIOLOGICAL stimulus and response connection in each scenario. This will help you identify the unconditioned stimulus and unconditioned response (the word unconditioned means "unlearned", aka "naturally occurring").
- 2. Then identify the stimulus that at first has no connection to the story/US&UR. This will be the neutral stimulus. The neutral stimulus always becomes the conditioned stimulus (or some close derivative of it).
- 3. The conditioned response will usually be the same as the unconditioned response (or some close derivative of it). The point of classical conditioning is that a behavior begins as UNCONDITIONED (unlearned) and becomes CONDITIONED (learned).

# **The Shower**

When Miah gets back to the dormitory after jogging around the campus, he likes to take a quick shower before going to class. One morning while taking a shower he hears someone flushing a nearby toilet. Suddenly, extremely hot water comes rushing out of the showerhead and Miah experiences excruciating pain. After muttering a few obscenities, he continues showering. A few minutes later, Miah hears another toilet flush and he leaps out of the shower.

- 1. What is the unconditioned stimulus?
- 2. What is the unconditioned response?
- 3. What is the neutral stimulus that becomes the conditioned stimulus?
- 4. What is the conditioned response?

#### **Stop the Carousel I Want to Get Off**

Molly was ecstatic when she learned her family was going to the state fair next weekend. When her family arrived at the state fair the temperature was in excess of 100°F, but Molly did not care because she was finally there. Molly stopped and watched some clowns performing next to the carousel. As she watched the silly antics of the clowns with the carousel music playing in the background, Molly got more and more sweaty and uncomfortable. Eventually, she fainted from the heat. After that trip to the state fair, every time Molly hears carousel musical she feels a little dizzy.

- 1. What is the unconditioned stimulus?
- 2. What is the unconditioned response?
- 3. What is the neutral stimulus that becomes the conditioned stimulus?
- 4. What is the conditioned response?

#### **When Good Tuna Goes Bad**

Ryan was really looking forward to lunch because his mother had prepared a tuna salad sandwich. Unfortunately, the mayonnaise she used had been left out too long and was spoiled. Not long after eating the sandwich, Ryan felt sick and had to rush to the bathroom. Thereafter, the mere mention of a tuna sandwich would make Ryan nauseous.

- 1. What is the unconditioned stimulus?
- 2. What is the unconditioned response?
- 3. What is the neutral stimulus that becomes the conditioned stimulus?
- 4. What is the conditioned response?

# **Kitties and Clickers**

Psychologists like to experiment on other organisms in their immediate environment, so Jenny decided to perform a few experiments on her kitty, Precious. Jenny had a little clicker that makes a loud 'CLICK' sound. She walked around the house, randomly clicking it while Precious rested in the living room. Then Jenny sat down with Precious, and used the flash on her camera to flash a bright light at the same time she clicked. Precious blinked because of the flash, and looked mildly annoyed. Jenny repeated this process with her 4 times, then clicked the clicker, without using the flash. She still blinked! (She also looked very unhappy).

- 1. What is the unconditioned stimulus?
- 2. What is the unconditioned response?
- 3. What is the neutral stimulus that becomes the conditioned stimulus?
- 4. What is the conditioned response?

# **Kitties and Snappers**

After Sabrina heard about Jenny's experiment, she wanted to try something with her own cat. Sabrina's cat, Jasmine, tends to follow her around the house (unless she's sleeping). When Sabrina feeds her, she puts her food dish on the floor. One day a few weeks ago, Sabrina tried a new procedure. After she put the food dish on the floor, she would snap her fingers, which was paired with her eating the food and licking her chops (yum!). One night about a week ago, a half hour or so before Sabrina normally feeds her, they were sitting on the couch. Sabrina decided to try snapping her fingers to see if there was any classical conditioning — Jasmine looked at Sabrina and licked her chops!

- 1. What is the unconditioned stimulus?
- 2. What is the unconditioned response?
- 3. What is the neutral stimulus that becomes the conditioned stimulus?
- 4. What is the conditioned response?

# Mmmm.... Liver!!!

Hannah and her sidekick, Avery, went out on the town in Manhattan one evening, to a swanky restaurant. Hannah and Avery saw a new food item on the menu (Fois Gras, which is seared goose liver), and decided to try it. Avery found it delicious, as did Hannah. After retiring to bed that night, Avery became nauseous, had a headache, and slept poorly. Avery has tried eating fois gras since then, but when looking at it, she immediately feels nauseous and can't eat it. (hint: Food aversion is a special case of classical conditioning which requires only one pairing of the stimuli)

- 1. What is the unconditioned stimulus?
- 2. What is the unconditioned response?
- 3. What is the neutral stimulus that becomes the conditioned stimulus?
- 4. What is the conditioned response?

#### **Feed Yo Cat**

Mr. Mac goes to the humane society and adopts a brand new kitten named Gretta. He takes his wonderful fur ball home and presents her a delicious dish of yellowfin tuna and shrimp, which Mr. M caught fresh from the sea with his bare hands. Upon presentation of her meal, Gretta begins salivating. For the next week, Mr. Mac whistles right before he presents Gretta with her food. Eventually, Gretta begins salivating just from hearing Mr. Mac's whistle alone.

- 1. What is the unconditioned stimulus?
- 2. What is the unconditioned response?
- 3. What is the neutral stimulus that becomes the conditioned stimulus?
- 4. What is the conditioned response?

#### **Crystal Maiden**

It's winter time for Rylai! Although she lives in South Carolina, an unusually cold winter has caused a snowfall in January. Rylai goes outside and immediately regrets her decision. The extremely low temperature causes Rylai to shiver in an attempt to warm her body up. As this is happening, Rylai also sees her first snowfall as small crystal flakes drop from the sky. As the harsh winter continues, Rylai notices something else as the weeks progress-sometimes when she wakes up in the morning and sees snow outside her window, she shivers even though its 75° in her room!

- 1. What is the unconditioned stimulus?
- 2. What is the unconditioned response?
- 3. What is the neutral stimulus that becomes the conditioned stimulus?
- 4. What is the conditioned response?

# **You Paid For This?**

It's another lunch day at Walnut Grove High School, which means chicken is on the menu. Aaron loves chicken, though, so he's a happy kid. As he's devouring "nuggets" of the dead bird, he suddenly gets sick and projectively vomits everywhere. It turns out the chicken wasn't cooked long enough. From that day on, just hearing that chicken is on the lunch menu during the daily announcements starts to make Aaron feel sick.

- 1. What is the unconditioned stimulus?
- 2. What is the unconditioned response?
- 3. What is the neutral stimulus that becomes the conditioned stimulus?
- 4. What is the conditioned response?

#### **Nose Hair Double-Take**

Jamal goes in for his yearly eye check-up. As part of his examination, the doctor needs to shoot a puff of air into Jamal's eye to check for glaucoma. This quick puff causes Jamal's eye to reflexively blink a few times. However, the doctor has to get extremely close to Jamal with his head tilted up when he performs the test, and Jamal can quite clearly see the doctor's nose hair sprouting out of his nostril when this happens. Curiously, whenever Jamal goes to trim his own nose hair in the mirror, he sometimes can't stop blinking.

- 1. What is the unconditioned stimulus?
- 2. What is the unconditioned response?
- 3. What is the neutral stimulus that becomes the conditioned stimulus?
- 4. What is the conditioned response?

# **That Car Makes Me Feel ... Aroused?**

Have you ever noticed how many car commercials features sexy, scantily clad young women? Enrique is at home one day watching his favorite television show, "Jersey Shore," when suddenly a commercial comes on for the new Prius. Interestingly, in every shot of the car a very attractive woman with a bodacious body is shown driving wearing a low-cut shirt. Additionally, a very sexy female voice narrates all of the features of the new Prius. From that day on, every time Enrique sees a Prius on the road, he feels arousal, but is a little confused by it.

- 1. What is the unconditioned stimulus?
- 2. What is the unconditioned response?
- 3. What is the neutral stimulus that becomes the conditioned stimulus?
- 4. What is the conditioned response?

### **The Elle MacPherson Question**

Everyday Elle receives a bouquet of roses from a secret admirer. When she sniffs the roses, she feels a tingling sensation which she loves. Every time she gets roses, she also receives a card that says, "Love always, xoxoxoxo." After enough deliveries, just the sight of the card alone makes Elle tingle. Later, her secret admirer also includes a picture of his cat, Gretta, with the card. Interestingly, Elle begins tingling whenever she sees a cat, although the tingle is not quite as strong as the one produced by smelling the flowers.

- 1. Who was the secret admirer?
- 2. What is the unconditioned stimulus?
- 3. What is the unconditioned response?
- 4. What is the neutral stimulus that becomes the conditioned stimulus?
- 5. What is the conditioned response?