

The following lesson plans are for the 2nd and 3rd day of the section on learning relating to classical conditioning.

It meets HS Psychology standards 1.1 Describe the principles of classical conditioning. 1.2 Describe clinical and experimental examples of classical conditioning. 1.3 Apply classical conditioning to everyday life.

Day one

Day 1 Date:

<p>Objectives:</p> <ol style="list-style-type: none">1. Students will be able to recognize aspects of classical conditioning examples.2. Students in small groups will write unique scenarios demonstrating knowledge of acquisition, extinction, generalization, discrimination, spontaneous recovery and reconditioning.	<p>Materials:</p> <ol style="list-style-type: none">1. Two handouts.2. Video clips on classical conditioning from 1904 30 minute Pavlov video-show few minutes of resource.
<p>Method:</p> <ol style="list-style-type: none">1. Power points2. Video clip.3. Students write a classical conditioning scenario.	<p>Evaluation:</p> <ol style="list-style-type: none">1. Classical conditioning examples2. Scenario.

Day two

Day 2 Date:

<p>Objectives:</p> <ol style="list-style-type: none">1. Describe Thomas Kuhn's perspective on scientific revolutions and relate to the establishment of a new paradigm for classical conditioning.2. Students will be able to describe in detail how and why Pavlov's contiguity model of classical conditioning is incorrect	<p>Materials:</p> <ol style="list-style-type: none">1. Video clips. (FHS Human Senses on taste aversion learning)2. Two handouts with questions.
<p>Method:</p> <ol style="list-style-type: none">1. Students after hearing lecture and seeing video clips on how Pavlov's model of classical conditioning is wrong, will discuss and answer questions in small groups on this topic.2. (Lecture covers blocking, masking, biological preparedness, taste aversion learning, auto shaping and sensory preconditioning.	<p>Evaluation:</p> <ol style="list-style-type: none">1. Questions on this topic.

USED THROUGHOUT LEARNING UNIT BY STUDENTS / QUESTIONS I WAOTE

Learning questions. Be able to answer all of the following questions.

- 1) Describe the processes of acquisition, extinction, generalization, discrimination and spontaneous recovery for both classical and operant conditioning.
- 2) Compare classical and operant conditioning. (You may use bullet and list answer).
- 3) Compare secondary conditioning and blocking. How are they similar and how are they different?
- 4) Describe how classical conditioning can cause a phobia, and how operant conditioning can maintain a phobia through negative reinforcement
- 5) Distinguish between primary and secondary reinforcement. Give example of each. Describe a token economy.
- 6) Describe the overjustification effect and give an example.
- 7) Describe the Premack principle and give an example.
- 8) Describe escape negative reinforcement and avoidance negative reinforcement. Then describe punishment. (Be certain to include how negative reinforcement and punishment are similar and how they are different). Give clear examples of both. Which of the two is more preferable to use? Do individuals look forward to negative reinforcement? What is a synonym for negative reinforcement? What are some of the bad side effects of punishment?
- 9) Describe how operant and classical conditioning are both present in the following situation. A young child hears the bell of an ice cream truck approaching in the summer time. This truck has come to her neighborhood every day for weeks but usually comes earlier in the afternoon. This makes her salivate and get excited. She then runs into the house and asks her dad for some money but her father refuses to give her any money since it is close to dinner. She then starts to cry and has a tantrum. After a few seconds, her father gives her the money in order to stop her from crying. (Label your answer with the terms unconditioned stimulus, neutral stimulus, conditioned stimulus, unconditioned response, conditioned response also (for operant) drives, cues, stimulus situation, operant, and negative and positive reinforcers).
- 10) Describe how you would use shaping to teach a pigeon to turn in a circle. Include the schedule of reinforcement you would start with to cause the pigeon to learn most quickly, and then describe the schedule you would switch to in order to make the circle-turning behavior very difficult to extinguish. Then describe three distinct techniques you would use to extinguish the circle-turning behavior. (What is the most effective way to extinguish the behavior?)
- 11) You are a behavior therapist treating a person who has a phobia towards rats. How would you treat this person? Include the terms reciprocal inhibition, systematic desensitization, modeling, and an anxiety hierarchy. Describe how the procedure uses classical conditioning and observational learning.
- 12) Describe how the cognitive perspective has changed the interpretation of both classical and operant conditioning.

For classical conditioning discuss how the contingency model is more accurate and more predictable than the contiguity model. (Blocking, masking, biological predispositions, lack of backwards conditioning, taste aversion learning and one trial learning) What relationship must occur between the CS (neutral stimulus) and US (unconditioned stimulus) within the contingency model of classical conditioning?

For operant describe instinctual drift, latent learning and vicarious reinforcement.
- 13) Be able to describe the five major schedules of reinforcement. (Continuous, fixed-interval, fixed-ratio, variable-interval and variable-ratio) Be able to give a good example of each and describe their effects on behavior. Why are behaviors learned under variable schedules of reinforcement the most difficult to extinguish? Why are behaviors learned under continuous reinforcement easiest to extinguish?
- 14) What is a post reinforcement pause? Why does a post reinforcement pause typically occur in a fixed-interval schedule of reinforcement?

CC examples / short essay

Answer all parts of each short essay question in the blue book. Be accurate yet concise. Please number your answers. The answers to 1-10 are to be written clearly on this paper. For Section I identify the US, UR, NS, CS, CR. (and GS and GR if needed)

Section I

1) A child (like all children) gets dizzy after going excessively fast on a merry go round. The next time the child sees the merry go round, they feel queasy.

US =

UR =

NS =

CS =

CR =

2) The nurse says, "Now this won't hurt a bit" just before stabbing you with a needle. The next time you hear "This won't hurt," you cringe in fear.

US =

UR =

NS =

CS =

CR =

3) When a student first hears the word can he does not flinch. However after the word can is spoken a stream of cold water is sprayed into his face by an exceptionally handsome, funny (and humble) AP Psychology teacher. After this occurs a few times, the student flinches just to the word can.

US =

UR =

NS =

CS =

CR =

4) A football coach gets ice cold Gatorade poured down his back after each victory just after his players yell "We Won!" Eventually the coach shivers at the words, "We won".

US =

UR =

NS =

CS =

CR =

5) A goldfish instinctively swims towards food when it is poured into the fish tank. Just before pouring the food, a light is turned on in the tank. Eventually the fish goes upward in response to the light even if no food is not poured in to the tank.

US =

UR =

NS =

CS =

CR =

6) A college student is taking a shower in a dormitory. After a toilet flushes, he is suddenly drenched with hot water that causes him great discomfort and makes him reflexively jump out of the path of the water. The next he hears the toilet flush he moves out of the path of the water before the hot water occurs.

US =

UR =

NS =

CS =

CR =

7) You have a hamburger at a new fast food restaurant that causes food poisoning. The next time you see a sign for that restaurant, you feel nauseous.

US =

UR =

NS =

CS =

CR =

8) Every day the mother of a four year old comes home from work and rings the doorbell prior to entering the house. A few seconds later, she enters the house to give her child a big hug, which all children find pleasurable. Eventually the child shows excitement and joy to the sound of the doorbell.

US =

UR =

NS =

CS =

CR =

9) Pavlov's original conditioning model. (Use food power and a tone).

US =

UR =

NS =

CS =

CR =

10) The little Albert scenario.

US =

UR =

NS =

CS =

CR =

GS =

GR =

Answer questions 11-16 in the blue book. Please be brief yet accurate. Please number your answers.

11) How do a conditioned stimuli and unconditioned stimuli differ? Can they ever be the same in the same classical conditioning example?

12) Describe and give an example of the procedure of higher order or second order conditioning.

13) Why is it important to include the term generalization when explaining the formation of a phobia that results from classical conditioning? Describe two ways that a generalized stimulus differs from a conditioned stimulus?

14) Describe a complete example of spontaneous recovery using Pavlov's original conditioning model.

15) Explain the research of John Garcia on taste aversion. Give two ways this research contradicted Pavlov's contiguity model of classical conditioning? (Be specific and detailed in your answer).

16) Describe how classical conditioning can contribute to individuals or animals dying from drug overdoses (even though they take the same amount of the drug). Label the US, CS and CR in your answer.

Name _____

Describe a unique scenario that demonstrates classical conditioning.

Name the:

Unconditioned stimulus _____

Unconditioned response _____

Conditioned stimulus _____

Neutral stimulus _____

Conditioned response _____

In your scenario, describe how each of the following would occur:
(Be sure to label them clearly).

Acquisition

Extinction

Generalization

Discrimination

Spontaneous recovery

Reconditioning

Secondary conditioning

Classical conditioning.

Comparison of contiguity (Pavlov) model of classical conditioning and contingency/cognitive (Rescorla) model of classical conditioning. (Contingency model states that the key factor in classical conditioning is how reliably the NS/CS predicts the US.

Three principles of classical conditioning according to the contiguity model. These all have been shown to be incorrect.

- 1) The specific choice of the CS is arbitrary. It does not seem to matter which CS is chosen-Pavlov referred to this as equipotentiality
- 2) Classical conditioning is a slow gradual process-multiple pairings of the NS and US are required for classical conditioning to occur.
- 3) The interval or duration of time between the NS and US is critical and must be brief.

Describe each of the following. Apply each in order to show how the contingency model is more accurate in explaining classical conditioning. Specify which and how each of the principles above is invalidated by the research below.

- A) Blocking
- B) Masking
- C) Taste aversion research (Garcia effect)
- D) Experiment with the bright noisy sweet water.