

## How People Learn Demonstrations: Group A

**Interference (Demo 1):** Listen to the list of words. When prompted, flip to the answer sheet and write down as many words as you can remember in the space for Demo 1.

**Organization (Demo 2):** Take 60 seconds to review the words inside the box below. When prompted, flip to the answer sheet and write down as many words as you can remember.

Metals			Minerals	Stones	
Rare	Common	Alloys	Precious	Masonry	
Platinum	Aluminum	Bronze	Sapphire	Limestone	
Silver	Copper	Steel	Emerald	Granite	
Gold	Lead	Brass	Diamond	Marble	
	Iron		Ruby	Slate	

**Context and Framework (Demo 3):** Listen to the passage. When prompted, flip to the answer sheet and write down as many ideas from the story as you can.

**Confirmation Bias (Demo 4):**

<http://www.nytimes.com/interactive/2015/07/03/upshot/a-quick-puzzle-to-test-your-problem-solving.html>

**Retrieval vs. Review (Demo5):** Read the paragraph below. Without looking back at the paragraph, answer the study question below. Then stop and wait for instruction.

**Operant conditioning** is a learning process in which behavior is sensitive to, or controlled by, its consequences. For example, a child may learn to make a cute face to get their parents to give them something they want, or a child might learn to avoid touching a hot stove. In contrast, classical conditioning causes an otherwise neutral stimulus (sight, sound, event, etc.) to signal a positive or negative consequence. For example, the sight of a colorful wrapper comes to signal "candy", causing a child to salivate, or the sight of the dentist's office comes to signal an unpleasant experience, causing the heart to start pounding. (Adapted from Wikipedia)

### Study Question

*Are the following examples of classical or operant conditioning (or neither)?*

a) A child won't touch a hot stove because it hurt her last time she did.

\_\_\_\_\_.

b) The stove makes a hissing sound so she jumps away from it.

\_\_\_\_\_.

c) A child whines to get out of going to the dentist's office.

\_\_\_\_\_.

d) A child likes the dentist because he is nice to her.

\_\_\_\_\_.

## Answer Sheet

**Interference (Demo 1):** Write down as many words as you can remember.

**Organization (Demo 2):** Write down as many of the words from the box on page 1 that you can remember.

Total = \_\_\_\_\_

**Context and Framework (Demo 3):** Write down as many ideas from the passage as you can.

Total = \_\_\_\_\_

**Retrieval vs. Review (Demo5):** Answer these final true/false test questions about operant conditioning.

Operant conditioning is a way in which behavior is shaped by its consequences.

\_\_\_\_\_ *True or False* \_\_\_\_\_.

Classical conditioning is a way to promote or inhibit a behavior by pairing it with a positive or negative stimulus.

\_\_\_\_\_ *True or False* \_\_\_\_\_.

Gambling is an example of operant conditioning.

\_\_\_\_\_ *True or False* \_\_\_\_\_.

Total Correct = \_\_\_\_\_

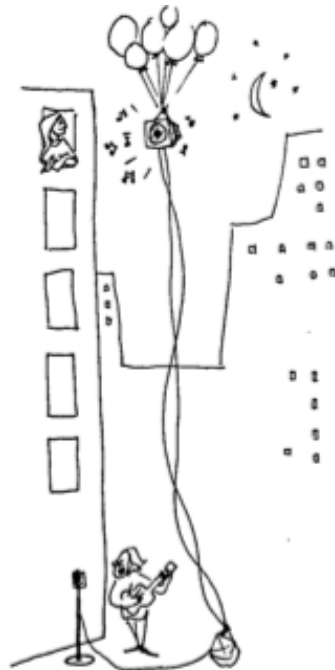
### Demonstrations: Group B

**Interference (Demo 1):** Listen to the list of words. When prompted, flip to the answer sheet and write down as many words as you can remember in the space for Demo 1.

**Organization (Demo 2):** Take 60 seconds to review the words inside the box below. When prompted, flip to the answer sheet and write down as many words as you can remember.

Steel	Granite	Marble	Lead
Sapphire	Brass	Copper	Emerald
Iron	Aluminum	Silver	Copper
Bronze	Slate	Limestone	Diamond
Platinum	Ruby	Gold	

**Context and Framework (Demo 3):** Listen to the passage. When prompted, flip to the answer sheet and write down as many ideas from the story as you can.



**Confirmation Bias (Demo 4):**

<http://www.nytimes.com/interactive/2015/07/03/upshot/a-quick-puzzle-to-test-your-problem-solving.html>

**Retrieval vs. Review (Demo5):** Read the paragraph below. Review the study question and answers below. Then stop and wait for instruction.

**Operant conditioning** is a learning process in which behavior is sensitive to, or controlled by, its consequences. For example, a child may learn to make a cute face to get their parents to give them something they want, or a child might learn to avoid touching a hot stove. In contrast, classical conditioning causes an otherwise neutral stimulus (sight, sound, event, etc.) to signal a positive or negative consequence. For example, the sight of a colorful wrapper comes to signal "candy", causing a child to salivate, or the sight of the dentist's office comes to signal an unpleasant experience, causing the heart to start pounding. (Adapted from Wikipedia)

### Study Question

*Are the following examples of classical or operant conditioning (or neither)?*

- a) A child won't touch a hot stove because it hurt her last time she did.  
     Operant Conditioning.
- b) The stove makes a hissing sound so she jumps away from it.  
     Classical Conditioning.
- c) A child whines to get out of going to the dentist's office.  
     Operant Conditioning.
- d) A child likes the dentist because he is nice to her.  
     Neither.

## Answer Sheet

**Interference (Demo 1):** Write down as many words as you can remember.

**Organization (Demo 2):** Write down as many of the words from the box on page 1 that you can remember.

Total = \_\_\_\_\_

**Context and Framework (Demo 3):** Write down as many ideas from the passage as you can.

Total = \_\_\_\_\_

**Retrieval vs. Review (Demo5):** Answer these final true/false test questions about operant conditioning.

Operant conditioning is a way in which behavior is shaped by its consequences.

\_\_\_\_\_ *True or False* \_\_\_\_\_.

Classical conditioning is a way to promote or inhibit a behavior by pairing it with a positive or negative stimulus.

\_\_\_\_\_ *True or False* \_\_\_\_\_.

Gambling is an example of operant conditioning.

\_\_\_\_\_ *True or False* \_\_\_\_\_.

Total Correct = \_\_\_\_\_

## Scoring Sheet

**Interference (Demo 1): How many people in your group remembered each of the words? Enter the total next to each word:**

Color		Metal	
Nurse		Horse	
Picnic		Train	
Flower		Orange	
Boat		Happy	
Tool			

**Organization (Demo 2): Add up the total number of words remembered from each of the people in your group:**

Person 1: \_\_\_\_\_ Person 5: \_\_\_\_\_  
Person 2: \_\_\_\_\_ Person 6: \_\_\_\_\_  
Person 3: \_\_\_\_\_  
Person 4: \_\_\_\_\_ Total: \_\_\_\_\_

**Integration (Demo 3): Add up the total number of ideas remembered from each of the people in your group:**

Person 1: \_\_\_\_\_ Person 5: \_\_\_\_\_  
Person 2: \_\_\_\_\_ Person 6: \_\_\_\_\_  
Person 3: \_\_\_\_\_  
Person 4: \_\_\_\_\_ Total: \_\_\_\_\_

**Retrieval vs. Review (Demo 5): Add up the total number of correct responses from each of the people in your group:**

Person 1: \_\_\_\_\_ Person 5: \_\_\_\_\_  
Person 2: \_\_\_\_\_ Person 6: \_\_\_\_\_  
Person 3: \_\_\_\_\_  
Person 4: \_\_\_\_\_ Total: \_\_\_\_\_