Basics of Classical Conditioning

Instructions: Please read the information as we go through this activity. Do NOT work ahead. Stop when you see the "STOP" sign or when instructed.

Learning Objectives:

1. Identify and apply elements of classical conditioning in real life examples
2. Interpreting real life examples through a theoretical framework (Information Processing)
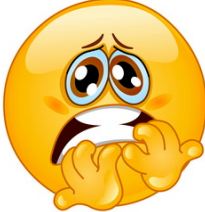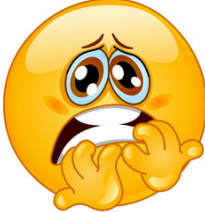
Roles

To pick roles, the person sitting closest to the podium/computer at the front of the classroom will be the manager. The next closest person the reader, the next closest the scribe, and the furthest away will be the spokesperson. Write your names in the boxes below and circle your own name.

1—Manager	3—Scribe
2—Reader	4—Spokesperson

Model 1

Stimulus	Response
(dentist)	(nervous)
(Puff of air)	(Eye blink)
	(fear)
	(drool)
	(fear)

1. In model 1, what do all of the elements under "stimulus" in model one have in common?

2. In model 1, what do all of the elements under "response" in model one have in common?

3. How are the stimuli related to the responses?

4. In your team, come to a consensus about a definition for stimulus. Use proper grammar and full sentences.

5. In your team, come to a consensus about a definition for response. Use proper grammar and full sentences.

6. Using model 1, which stimulus-response pairs naturally occur in people (without any prior learning)? And why would that happen?

7. Using model 1, which stimulus-response pairs needed to be learned (through experience) in order to have the stimulus cause the response?

8. For this question, you are going to use your answers from question 7:
   Often, when a stimulus->response connection is learned, there is a second stimulus that produces the response naturally (without learning). These two stimuli are paired together.

   a. For each of the learned stimuli-> response pairs in model 1 (which you identified in question 7) try to think of a second stimulus that might more naturally (without learning) produce the response. In other words, what happens **with** the stimulus, to create the response. Provide your team response in the models below.

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   ┌───────────────────────┐
   │                       │
   │  (occurs with the     │
   │   stimulus to create  │
   │   the response)       │
   └───────────────────────┘
   ```

   ┌─────────────────────────┐   ┌─────────────────────────┐
   │   │   │   │
   │ Stimulus from model 1 │ ─────────────────────► │ Response from model 1 │
   └─────────────────────────┘   └─────────────────────────┘

   ```
   ┌───────────────────────┐
   │                       │
   │  (occurs with the     │
   │   stimulus to create  │
   │   the response)       │
   └───────────────────────┘
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   ┌─────────────────────────┐   ┌─────────────────────────┐
   │   │   │   │
   │ Stimulus from model 1 │ ─────────────────────► │ Response from model 1 │
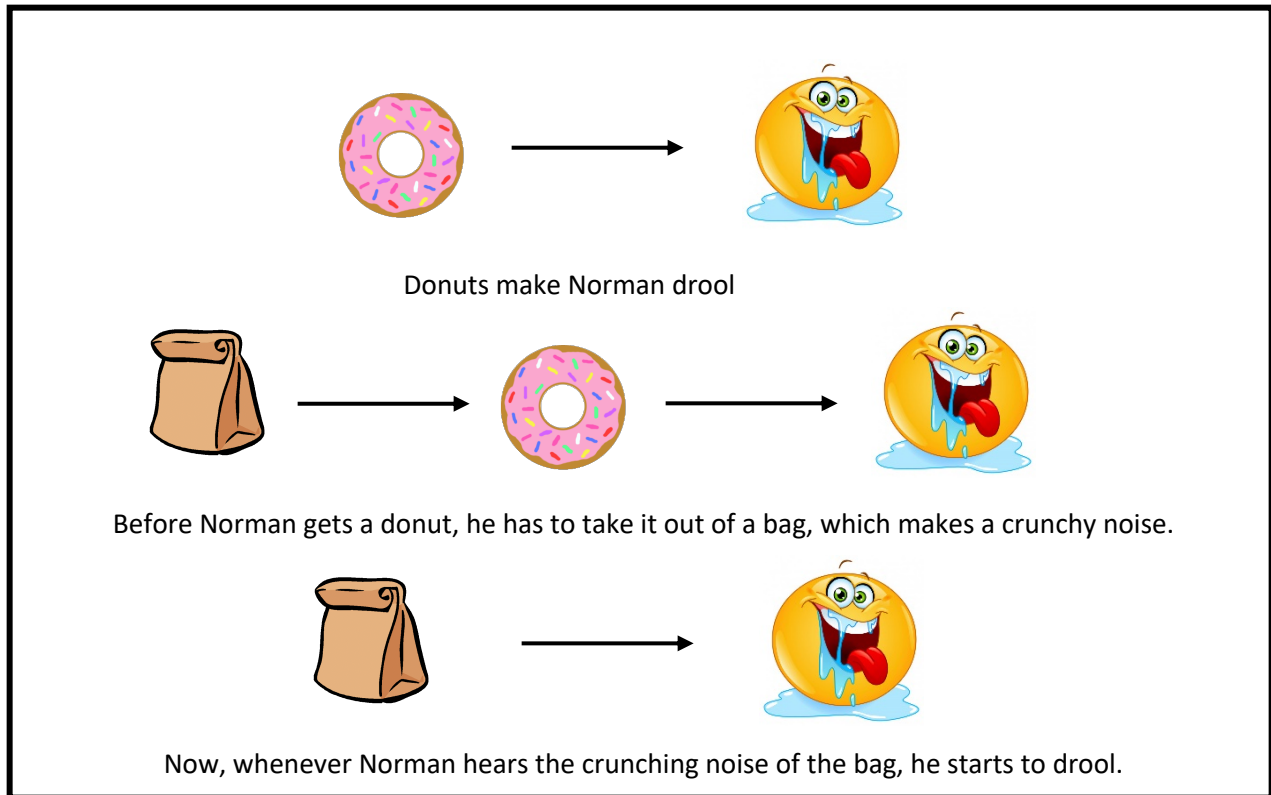   └─────────────────────────┘   └─────────────────────────┘
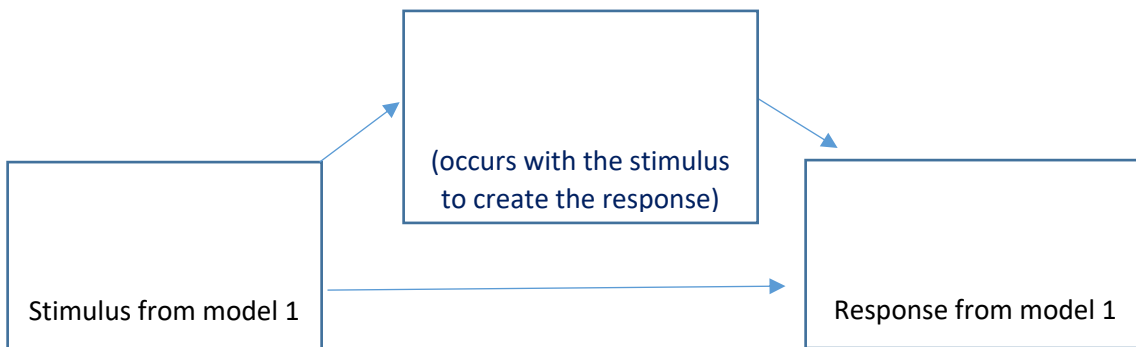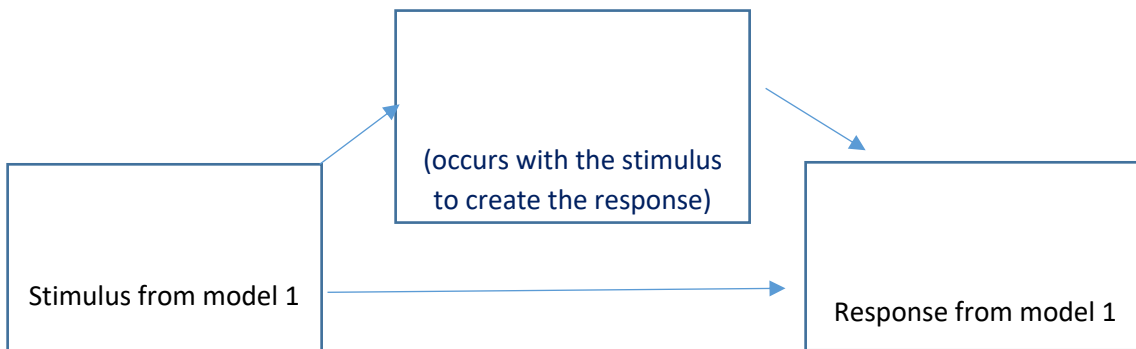
9. Forming these associations or connections between two stimuli in order to produce the response is called **conditioning (specifically, classical conditioning)**. Therefore, anything that had to be learned, is conditioned, anything that occurred naturally is unconditioned.
   a. In the examples in question 8, what is the unconditioned stimulus in each model (what stimuli produced a response naturally, without learning)?

   b. In the examples in question 8, what is the conditioned stimulus in each model (what stimuli produced a response only once it was paired with something else or learned)?

   c. In the examples in question 8, what is the conditioned response in each model?

Model 2

Donuts make Norman drool

Before Norman gets a donut, he has to take it out of a bag, which makes a crunchy noise.

Now, whenever Norman hears the crunching noise of the bag, he starts to drool.

10. Using the example in model 2, label the parts of classical conditioning by **circling the part(s) of classical conditioning** that correspond to the pieces in the model:
    a. The donut is the:
        i. Unconditioned stimulus
        ii. Unconditioned response
        iii. Conditioned stimulus
        iv. Conditioned response
    b. The crunching sound of the bag is the:
        i. Unconditioned stimulus
        ii. Unconditioned response
        iii. Conditioned stimulus
        iv. Conditioned response
    c. Drooling is the (hint: you should circle two):
        i. Unconditioned stimulus
        ii. Unconditioned response
        iii. Conditioned stimulus
        iv. Conditioned response
11. Given your answers to question 10 and what you learned from model 1, fill in the following statement with the correct parts of classical conditioning:

The _ _____ always becomes the __ _____ after conditioning (learning) occurs.

12. In each of the following examples, identify the parts of classical conditioning:

a. Jamie has no real feelings about the smell of garlic. Jamie's partner eats garlic everyday, and the two of them often kiss, which causes Jamie to have sexual arousal. Now Jamie becomes sexually aroused by the smell of garlic breath.
    i. Unconditioned stimulus: _____
    ii. Unconditioned response:_____
    iii. Conditioned stimulus: _____
    iv. Conditioned response:_____
b. Jesse would often swim in a lake. One day, while swimming in the lake, Jesse was bitten by a snapping turtle, which scared him. Now Jesse is afraid to swim in the lake.
    i. Unconditioned stimulus: _____
    ii. Unconditioned response:_____
    iii. Conditioned stimulus: _____
    iv. Conditioned response:_____
c. POG is a product. In their commercial, they have silly people doing funny tricks with POG, so potential customers laugh and have a pleasant feeling. POG is hoping that potential customers will develop a pleasant feeling towards POG.
    i. Unconditioned stimulus: _____
    ii. Unconditioned response:_____
    iii. Conditioned stimulus: _____
    iv. Conditioned response:_____
13. Come up with your own example of classical conditioning as a group. Describe it below, then label the parts of classical conditioning.

    i. Unconditioned stimulus: _____
    ii. Unconditioned response:_____
    iii. Conditioned stimulus: _____
    iv. Conditioned response:_____

14. How confident do you feel in your ability to identify the parts of classical conditioning?

1   2   3   4   5
Not at all confident   Fully confident