



PSYCHOLOGY

WELCOME TO PSYC 110

brotip #1144

money can't buy
happiness, but it can
buy music.
close enough.

brotips.com

PSYC 110 (General Psychology)

Module 9: Learning

Trenton C. Johanis, Ph.D.



How are we doing on SONA participation?

section	mean credits earned	% of students who have...	
		started	finished
	2.6	85%	15%
	2.4	79%	16%
	2.3	81%	15%
110 (iophanis) ALL	2.0	73%	11%
	1.7	69%	9%
	1.2	59%	6%

bruh

If we want live music for ClickerFest, let's get to the TOP 2!



How are we doing on SONA participation?

section	n	average credits earned	% of students who have...	
			started	finished
009	14	3.4	86%	29%
011	19	2.3	79%	11%
003	28	2.3	79%	21%
001	28	2.2	82%	11%
002	27	2.1	81%	11%
007	28	2.0	79%	7%
004	27	1.9	74%	7%
012	27	1.8	67%	15%
013	8	1.8	50%	13%
031	21	1.7	71%	5%
008	28	1.6	61%	7%
005	24	1.3	63%	8%

If we were to call it now...

2% Extra Credit (1st)

1% Extra Credit (tie for 2nd)

1% Extra Credit (tie for 2nd)



Submit the Collab Project Check-in on Friday

Collaborative Project: FYP or die (20%)

Full assignment guidelines are posted on Canvas!

TA Check-In (3%) due **April 4**

- One submission per group (choose anyone)
- Confirm group members (last chance for any changes!)
- Explain specific topic
- Choose type of media (Reel, Song, Podcast, etc.)
- Decide group roles (Researcher, Performer, etc.)
- Identify three key deadlines for your group's progress
- TA will provide feedback and let you know if you're on the right track

Final Submission (12%) + Reflection (4%) due **April 30**





What should we get out of today?

THE PLAN

NON-ASSOCIATIVE LEARNING

CLASSICAL CONDITIONING

SWEET REVENGE



We learn in three ways

Non-Associative

A stimulus is not paired with a specific behavior

Our response to a stimulus changes (increases or decreases)
over time with repeated exposure

Associative

A stimulus is paired with a specific behavior

We learn the relation between two pieces of information
(e.g., behavior and consequence, stimulus and response)

Social Learning

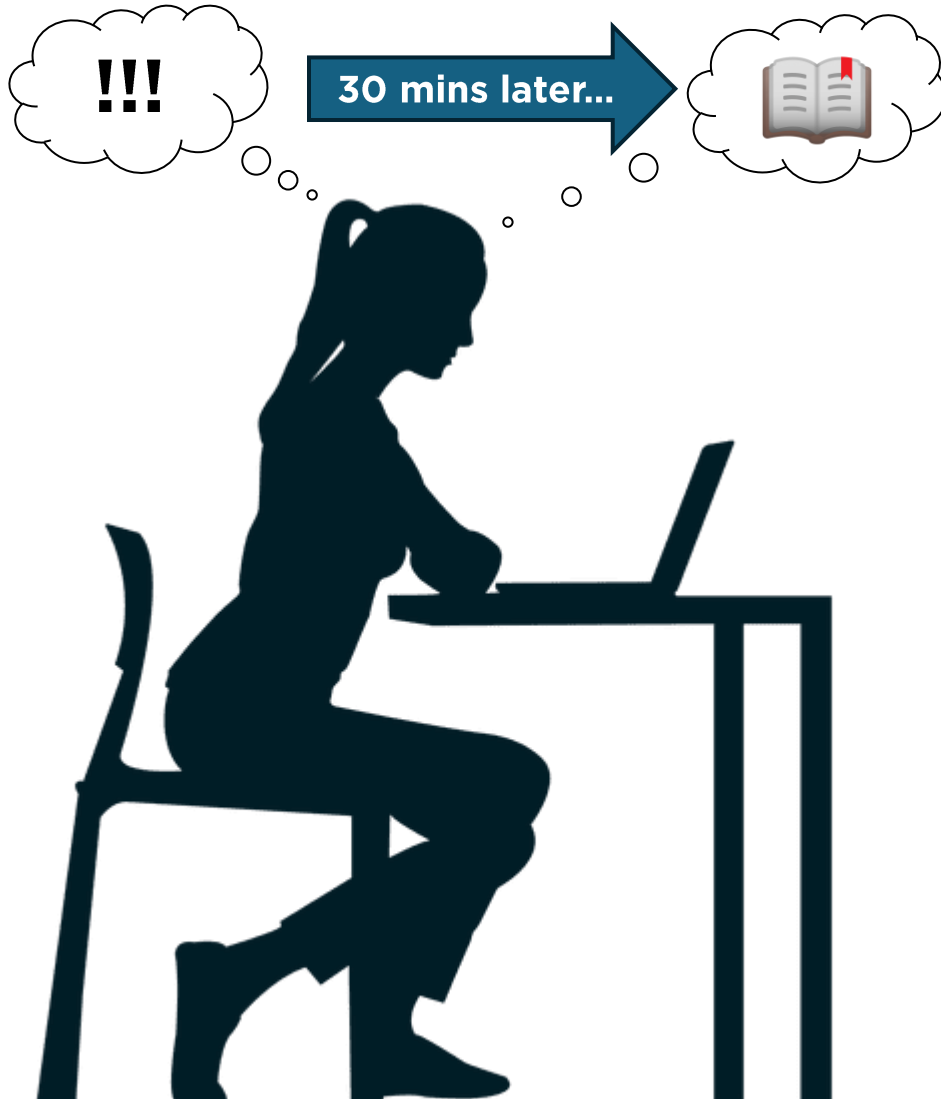
Modeling our behavior after others' behavior

Facilitated by interaction and observation



We “get used to” meaningless stimuli around us

Habituation





We can become more sensitive to a stimulus over time

Sensitization

[How I Met Your Mother – Lily Chewing](#)

Sensitization can happen suddenly or due to repeated exposure



Habituation



Sensitization



We learn in three ways

Non-Associative

A stimulus is not paired with a specific behavior

Our response to a stimulus changes (increases or decreases)
over time with repeated exposure



Associative

A stimulus is paired with a specific behavior

We learn the relation between two pieces of information
(e.g., behavior and consequence, stimulus and response)

Social Learning

Modeling our behavior after others' behavior

Facilitated by interaction and observation



There are two types of associative learning



Classical Conditioning



Operant Conditioning



Ivan Pavlov first explored Classical Conditioning



Experimenter + Food -> Salivate



Ivan Pavlov first explored Classical Conditioning



Experimenter alone -> Salivate



Ivan Pavlov explored Classical Conditioning

Food alone -> Salivate



Metronome + Food -> Salivate



Metronome alone -> Salivate





Classical Conditioning is based on contingencies

Contingency:

The presence of one stimulus reliably predicts the presence of another





Classical Conditioning is based on contingencies

Classical Conditioning

The learning of a contingency between a particular signal and a later event that are paired in the same time and/or space



Classical Conditioning is based on contingencies

Unconditioned Stimulus (US)

Any stimulus or event that occurs naturally, prior to learning



Unconditioned Response (UR)

The natural response that occurs after the unconditioned stimulus, prior to learning

Usually the same or similar

Conditioned Stimulus (CS)

Paired with the unconditioned stimulus to produce a learned contingency



Conditioned Response (CR)

The response that occurs once the contingency between the CS and the US has been learned



Acquisition is the learning of a contingency



UR

US



CR

CS





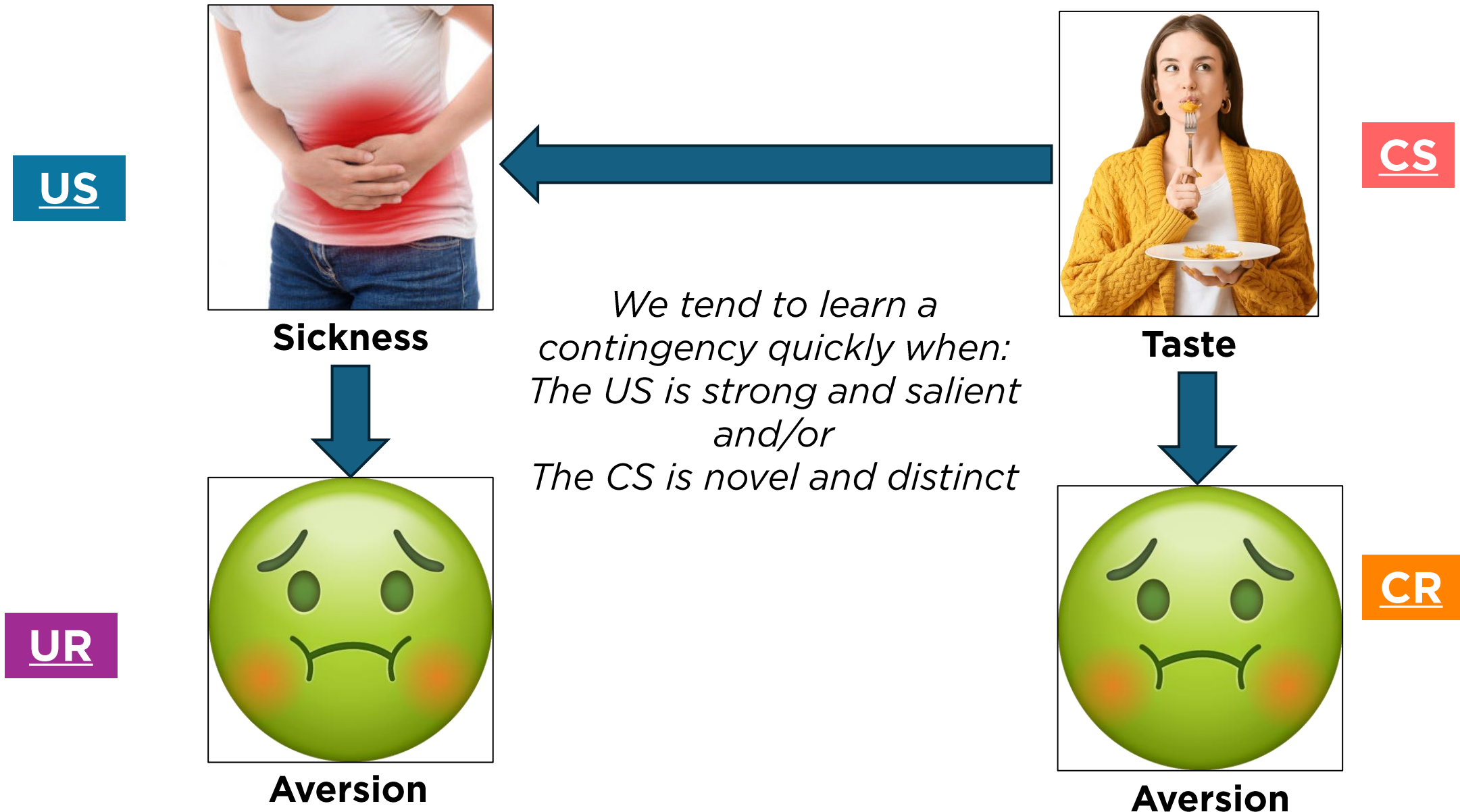
Acquisition is the learning of a contingency

The logo for 'point solutions' is centered within a white rounded rectangle. The word 'point' is written in a bold, magenta, lowercase sans-serif font. Below it, the word 'solutions' is written in a bold, black, lowercase sans-serif font.

<https://youtu.be/bqgVB6VI-II?si=OBc3LbCa60W6IWmE&t=198>



Acquisition can happen slowly or quickly





Acquisition can happen slowly or quickly

Two volunteers needed!

Role 1: Reader (involves reading aloud)

Role 2: Teacher (involves spraying Trenton in the face with a spray bottle)

The next slide will display a short story. First, I'm going to leave, and as a class, you're going to decide what component of the story is going to be the CS in your contingency. For example, the CS can be every time a certain word appears, or every word that starts with a certain letter, or even some cue from the Reader (e.g., when they take a long pause or make a certain sound).

When I come back, the Reader is going to read the story aloud, and the Teacher is going to facilitate my acquisition of the contingency by spraying me in the face with water (US) every time the CS is presented.

For our other classmates, what is the CR in this situation? Try to count how many times the response turns from a UR (in response to the US) and a CR (in response to the CS). And, do I make any errors (e.g., false association)?





Acquisition can happen slowly or quickly

"A Busy Day for Bob"

Bob the Bear woke up bright and early. He brushed his big, brown fur and bounded outside. The breeze was brisk, and birds were bustling in the branches.

Bob decided to build a boat. He gathered bits of wood, balanced them carefully, and tied them with rope. But when he pushed it onto the water—splash!—it sank!

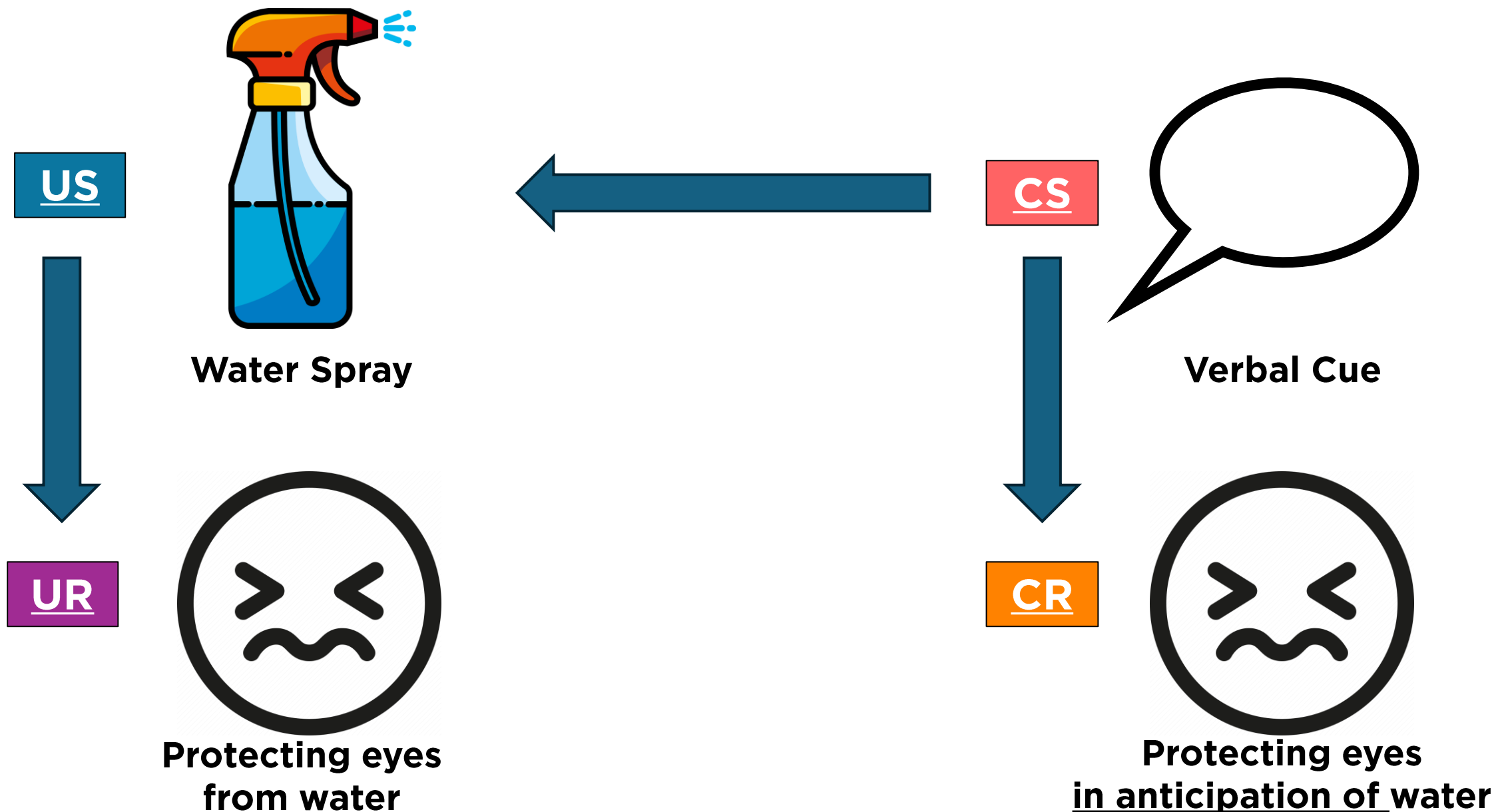
"Oh well," Bob said, chuckling. He grabbed his bike and began to pedal through the forest. He zoomed past buzzing bees, bumpy rocks, and a barking dog. His belly rumbled, so he stopped for blueberries and bread by the brook.

After a long, busy day, Bob was ready for bed. He bundled himself in a blanket, closed his eyes, and dreamed of tomorrow's adventures.





Acquisition can happen slowly or quickly





What should we get out of today?

THE PLAN

NON-ASSOCIATIVE LEARNING

CLASSICAL CONDITIONING

SWEET REVENGE



How did we do?

A person with long, dark hair is seen from the back, looking out over a field of tall grass towards a bright, hazy sunset. The sky is a mix of orange and yellow, and the grass is silhouetted against the light.

**KEEP YOUR FACE
ALWAYS TOWARD THE
SUNSHINE—AND
SHADOWS WILL FALL
BEHIND YOU.**

WALT WHITMAN

For y'all:

Tuesday Quiz 9 **is April 4**

Collab Project Check-in **due April 4**

InQuizitive **due April 6**

Reflection Journal **due April 6**