

Lesson Plan

“Good Times” Review Lesson for the Learning, Cognition, and Neuroscience Units

This lesson is not focused on a specific objective(s) but rather is a review lesson that focuses particularly on the following standards:

1.1 Identify the major divisions and subdivisions of the human nervous system

and their functions

2.1 Describe the processes of operant conditioning

2.1 Explain strategies for improving the encoding, storage, and retrieval of memories

As the date of our AP Exam looms, many students begin to feel the stress of their pending exams. Others begin to question their abilities or their mettle. A large number of students are facing two weeks of stressful tests and , while most would not openly admit it, they can feel overwhelmed. There are times when a “break in the action” of a typical classroom lesson is much needed. This is why I believe the “Good Times” Review can be beneficial. I like to use it during the week before AP Testing begins. The lesson gets students up and moving. Oftentimes, laughter is involved. Phones get pulled out and comical video typically gets posted in a variety of places. However, in the process, semantic encoding, priming, relearning, retrieval, and recall all take place as well, which can definitely help all on the final AP Test.

Day 1

For the Bell Assignment (or whatever you call the start of your class as you take roll–Bell Ringer, Entry Ticket, Warm-up, etc), I have my students do a Quizizz that can be pulled from their pre-existing library. Of course, you do have the option of making your own if you prefer.

Other options can include Quizlet, Albert, APClassroom, or MagicSchool.ai, to name a few. The bottom line is that you want to see a baseline on what your students already remember. In my case, I emphasize the units of Neuro, Learning, and Cognition with this lesson. Keep the pre-quiz brief—no more than 20 questions.

After taking the pre-quiz, tell your students it's time for Good Times. I am not a mega-fan of country music, but I like the Alan Jackson rendition of "Good Times" because it reminds us that learning should include a good time when possible. Yeah, I know the lyrics mention drinking so you can either give a disclaimer beforehand or maybe have students refer to their psych knowledge on why so many people feel the need to incorporate drinking into their own "good times" and the psychological reasoning behind it. Either way, I must say I have never had to deal with drama because of the lyrics of the tune. However, if you are uncomfortable with "Good Times," you can easily use a completely different song or genre of music as long as the tune is or can be linked to a sort of line dance routine. Use music you actually like instead of trying to appease the masses because we all know that regardless of what we select, a segment of our classrooms will call it lame regardless. That's fine. That just gives us the chance to ask another psych question: What psych concepts determine what music we like? That query can take us into the Development unit. So, if you dislike Alan Jackson, not a problem. Find your own tunes and dance.

Other options related to country music:

<https://www.youtube.com/playlist?list=PL8zP47fAkmHg7lwWs5-KpUh6pEwBI2yHO>

Other options in General:

<https://www.youtube.com/playlist?list=PLu5ZT49H3NwQz0VZzfinwVF9NPRjKbiyZ>

Once you make a final call on the dance you plan to use, talk with students in each of your classes who are talented dancers. By April you should already know who has dancing skills so capitalize on what talents your students already possess. Use Youtube to show them the dance you want to recreate in class, and give them 24-48 hours to plan to teach it. They will be doing something they like, and I have never had a student teacher not come back prepared. To guard against problems in case your “teacher” is absent, I recommend having 2-3 dance instructors per class ready to go.

After the students take their prequiz, if possible, move outside. My class is adjacent to a teacher's parking lot so we move where we have plenty of space in the parking lot. You might have access to at least a gym corner or maybe a courtyard where other classes won't be disturbed. Or maybe you can temporarily move your desks or tables to the hallway. Since you can use a wireless speaker for this lesson, you can pull this off in the great outdoors which is my preference. With that said, this lesson can be dependent on weather so plan ahead by watching your forecast. You don't want to get caught by overcast skies and rain when you plan to be outside for your Good Times. The positive thing about this lesson is that it is flexible and not dependent on what you did the previous day so you can fit it in when the weather is right during that last week of April or first week of May.

Once you get to your “dance studio,” let your student teachers take over. You now become a student. In my case, I am a special needs student when it comes to dancing, so I try to line up beside others who have trepidation or lack confidence in general. Watch and learn the dance with a focus on (PR) Positive Reinforcement but maybe use (PP) Positive Punishment on the fun-loving clowns of the class. Don't force this on ALL but kindly encourage all to at least try. This is where my inability to dance can make students think, “Hey, at least I am better than

that old guy.” When students choose not to participate, you can still bring in terms related to our motivation and social psychology chapters. You can also use these leery students as the videographer or sound experts so they don’t feel ostracized which can also bring in the personality unit with the Big 5 or Humanistic perspective connected to the belonging factor.

During this time of instruction when the student teachers are leading, take the opportunity to remind classes about shaping, Positive Reinforcement, and Negative Reinforcement (I encourage the dance teachers to use this “NAGative reinforcement” on me as well as model PP and (NP) Negative Punishment on me for show whether I need it or not). Chunking, implicit v explicit memory, attention, observational learning along with all the social psych group dynamics will be on display. Typically, the teaching part takes 15-20 minutes before we can roll through the entire dance routine without having to stop and remediate. Your goal does not have to be dancing through the entire song. Rather, your goal is to watch the various interactions of individuals and small groups so you can debrief by using as many relevant psych concepts as possible.

When you leave your “dance floor” and get back into your classroom, pull up the following list (see "Dance recall columns" attachment below also):

https://docs.google.com/document/d/1IMT0xqlAuQX-hsZ6_WkDx9QuInk6WNgYTPR9u4iWYG0/edit

Have your students highlight, circle, or underline 2 key vocab words from each column that can be connected to the Good Times activity. Beside each term, each student should apply it, and explain how the concept relates to the dance scenario. For example, a student might highlight “intrinsic motivation.” They would then state something like: “Antoine already loves to dance so he was excited and ready, willing and able to focus on learning the dance to see how

he could add his own creative moves. As a result, learning the dance was very easy for him.”

Or, “Riley used her left motor cortex to enable her to move her right leg at the precise time.”

If time allows, have students pull up or you pass out the 425 Key terms handout. The link for these terms is below:

https://www.jackson.stark.k12.oh.us/site/handlers/filedownload.ashx?moduleinstanceid=2468&dataid=13251&FileName=ap_425_terms_exam.pdf

Have them refer to the Key Terms document, and locate 5-10 terms from other random units that have concepts that could also be connected to the Good Times activity.

All term linkages to the line dance need to be submitted by the end of the period. If time is excessively tight, then this part of the assignment can be completed as homework or pushed to Day 2.

DAY 2

Today’s Bell Assignment is predicated on things you saw the previous day. Create 4-5 multiple questions and 2-3 recall questions related to what happened during the Good Times dancing. You know what students can be “called out” without concern but keep it light. For example:

MCQ Sample Questions:

1. One student who struggled repetitively with the turns was
 - A. Clarisse
 - B. Liset
 - C. Hayden
 - D. Olivia
 - E. Loc

2. What color top was our student dance teacher wearing yesterday?

- A. White
- B. Gray
- C. Red
- D. Black
- E. Striped

3. What type of shoes did the person to your right in the line dance wear yesterday?

- A. Running shoes
- B. Sandals
- C. Boots
- D. Heels
- E. Dress shoes

Questions like those above are simple, but more importantly, they give you a chance to review the 3-stage memory model. You can ask questions that would bring in concepts of sensory memory, selective attention, maintenance rehearsal, shallow v effortful processing, and the list goes on and on.

(This next question is totally random but is used as a potential primer for one of the recall questions, which will give you another review topic to bring in today)

4. From the list below, what is your favorite breakfast food (yeah, i realize some of you don't eat breakfast; that is not the point. Pick one)

- A. Eggs and bacon
- B. Waffles with lots of butter and syrup
- C. Cold pizza
- D. Granola and yogurt
- E. Waffles with peanut butter

RECALL

- 5. What is the next line in the song after the phrase, "Cause I've been working all week. . . "
- 6. What teacher(s) or student(s) walked by while we were practicing yesterday. Describe their looks.
- 7. What restaurant is mentioned in the song? (for those of you unfamiliar with "Good Times," the answer is Waffle House.)

After recapping the Bell Assignment and delving deeper into related terms like next-in-line effect, rehearsal, selective attention, priming, Ebbinghaus forgetting curve, and a variety of other options, move students into groups of 3. Have students share with each other the terms they highlighted in the various columns. As they talk you circulate with a list of the columns and mark off the terms that were linked by students to the dance activity. You may notice there are obvious terms that never get mentioned by any group, and you may need to remind the classes of these terms that were underutilized or overlooked.

Have your hierarchical or simple flow charts ready after you have discussed and applied terms.

[Memory Flowchart](#)

[Operant Conditioning Flow Chart](#)

[Brain Diagram](#)

[Brain Diagram Word Bank](#)

These files are all also attached to the end of this document.

Either pass out or pull up the flow charts with accompanying key terms that were mentioned or not. The same groups then take the time to insert the key terms into the correct boxes and lines that should show how well the students understand the linkages of our various key terms.

There have been some years when I have been more “on my game” where I drew flow charts on the whiteboard or large chart paper. Of course, students can do this as well if you want. I then use notecards, copy the key terms and have them separated on pieces of paper. Students then compete to tape the correct terms into the matching boxes of the flow charts. You can time them or go head to head. This competition format will not be the best call for all your classes, but I bet most of you have a particular class that responds best when extrinsic motivators – even if it’s only bragging rights– are in play.

If you didn’t get to the 425 Key Terms handout yesterday, go to it now.

Finally, come back to something close to the original pre-quiz. Have students take this individually, but then have them compare their scores with their group before finalizing their answers. Hopefully, scores from this diagnostic tool will show better grades than the prequiz. If not, well, at least you made the attempt to increase endorphins and reduce the cortisol levels of your hard-working students and reminded your scholars and wanna-be scholars of a fact we all know as teachers– Learning Psych can create plenty of Good Times.

References

Basic Brain Anatomy Quiz. (n.d.). PurposeGames.com. Retrieved January 25, 2024, from

<https://www.purposegames.com/game/basic-brain-anatomy-game>

Country Music New (2022, September 14). *Alan Jackson- Good Time (Lyrics)*. [Video]

YouTube. https://www.youtube.com/watch?v=_y9wXb9IyXY

IvyPanda. (2023, October 31). *Memory Chart Stages in Psychology*.

<https://ivypanda.com/essays/memory-chart-stages-in-psychology/>

Myers, D. A. (2015). *Myers' Psychology for AP* (2nd ed.). Worth.

Parchment, Phillip. (2016). *Developing Critical Practice in Education: Final Project*.

https://www.researchgate.net/publication/306106480_Developing_Critical_Practice_in_Education_Final_Project/citation/download

Pattynama, Pete (2014, October 29). *Top 10 Line Dances* [Video Playlist]. YouTube. URL

<https://www.youtube.com/playlist?list=PL8zP47fAkmHg7lwWs5-KpUh6pEwBI2yHO>

Payne, Kristina (2023, August 23). *Hip Hop Line Dancing* [Video Playlist]. YouTube. URL

<https://www.youtube.com/playlist?list=PLu5ZT49H3NwQz0VZzfinwVF9NPRjKbiyZ>

Scribbr. (2020, August 20). *Develop a theoretical framework in three steps* [Video]. YouTube.

<https://youtu.be/4y1BAqOnhMM>

The 425 Terms You 'Ought To Know For The AP Psychology Test On May 2 nd. (n.d.).

https://www.jackson.stark.k12.oh.us/site/handlers/filedownload.ashx?moduleinstanceid=2468&dataid=13251&FileName=ap_425_terms_exam.pdf

Dance Recall Columns

1

observational learning
déjà vu
autonomic nervous system
explicit memory
mnemonics
somatic nervous system
hormones
primary reinforcer
Positive punishment
long-term memory

2

Wernickes' area
limbic system
plasticity
shaping
acoustic encoding
Broca's area
semantic encoding
Angular gyrus
Cerebral cortex
Thalamus

3

conditioned/secondary reinforcer
Anterograde amnesia
fixed-ratio schedule
endocrine system
central nervous system
Prospective memory
Recency effect
Amygdala
recognition
recall

4

modeling
sensory neurons
latent learning
retrieval
Eidetic memory
parasympathetic nervous system
spacing effect
Chunking
priming
motor cortex

5

fixed-interval schedule
law of effect
flashbulb memory
working memory
hypothalamus
synapse
medulla
positive reinforcement
peripheral nervous system
Recall

6

dendrite
axon
variable-interval schedule
short-term memory
sensory memory
reuptake
mood-congruent memory
mirror neurons
Negative punishment
temporal lobes
Serial position effect

7

motor neurons
implicit memory
occipital lobes
encoding
Confabulation
Primacy effect
Basal ganglia
Retrograde amnesia
long-term potentiation (LTP)
automatic processing

8

sensory cortex
sympathetic nervous system
frontal lobes
corpus callosum
parietal lobes
association areas
brainstem
adrenal glands
peripheral nervous system
action potential

10

echoic memory
misinformation effect
intrinsic motivation
prosocial behavior
hippocampus
threshold
myelin sheath
continuous reinforcement
cognitive map
reinforcer
Interneurons

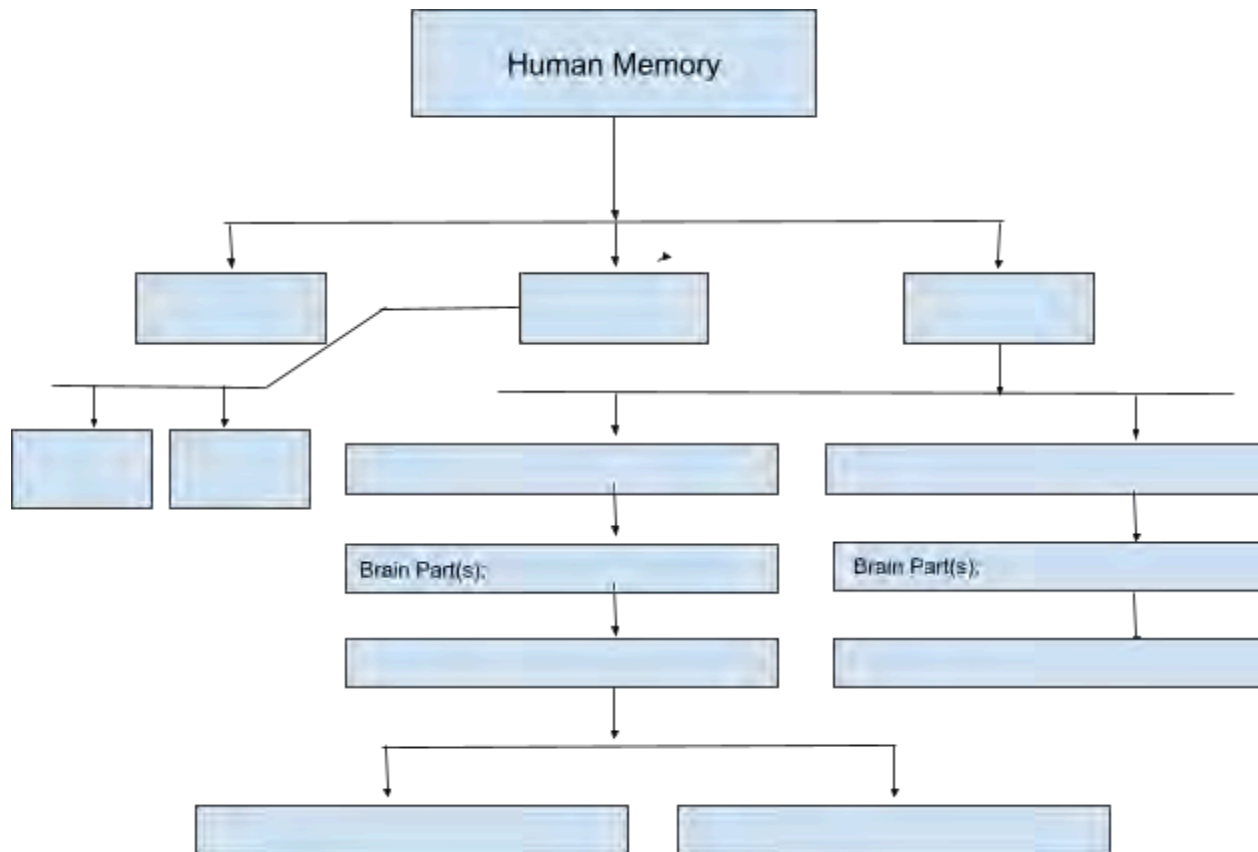
11

repression
endorphins
pituitary gland
Episodic memory
cerebellum
relearning
retroactive interference
rehearsal
source amnesia
reticular formation

12

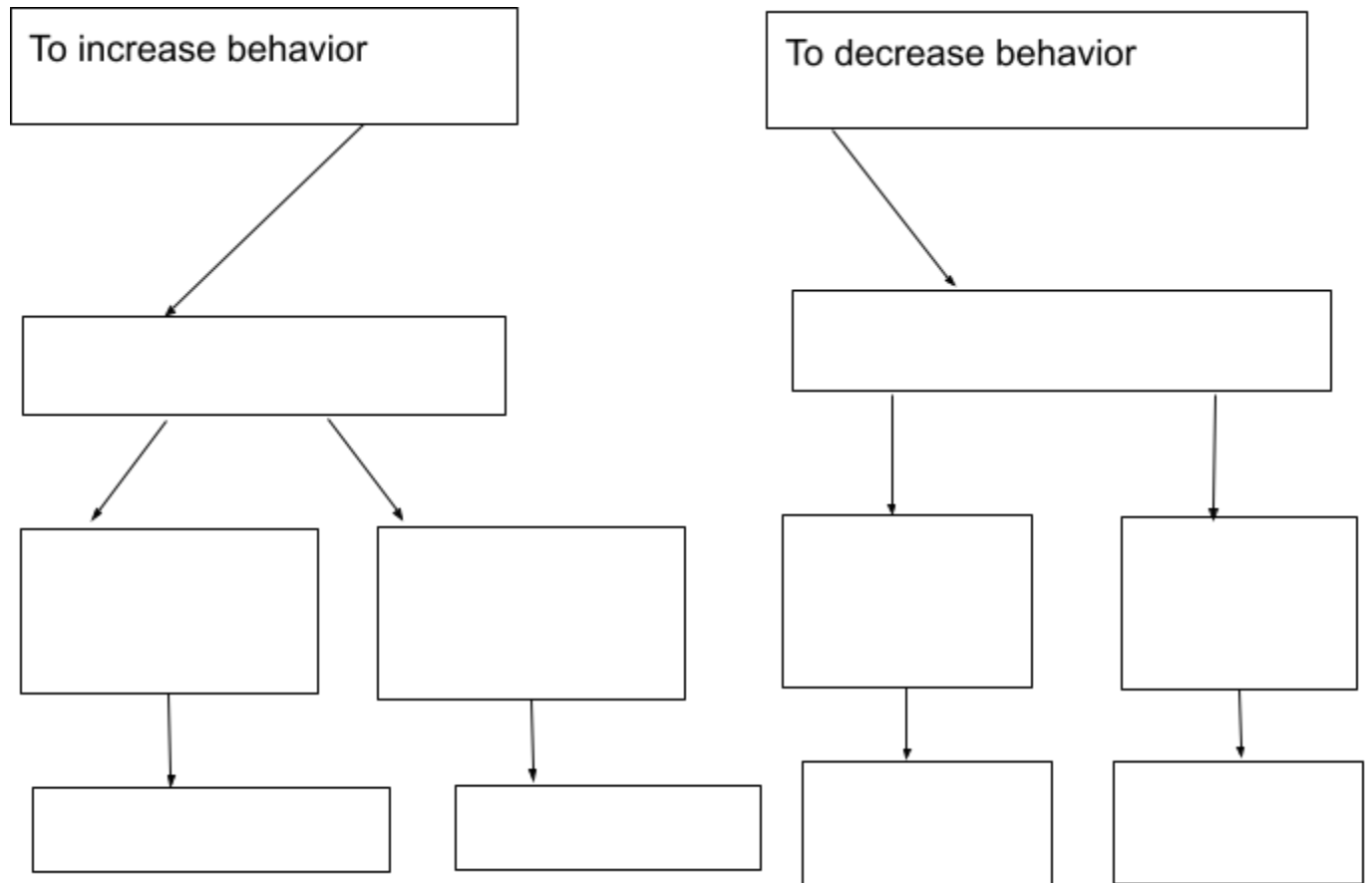
imagery
Storage
neurotransmitters
variable-ratio schedule
extrinsic motivation
iconic memory
effortful processing
partial (intermittent) reinforcement
proactive interference
negative reinforcement
visual encoding

Memory Flow Chart



Operant Conditioning Flow Chart

What is the goal?



Punisher

Reinforcer

Something is added

Something is removed or avoided

Positive Reinforcement

Negative Reinforcement

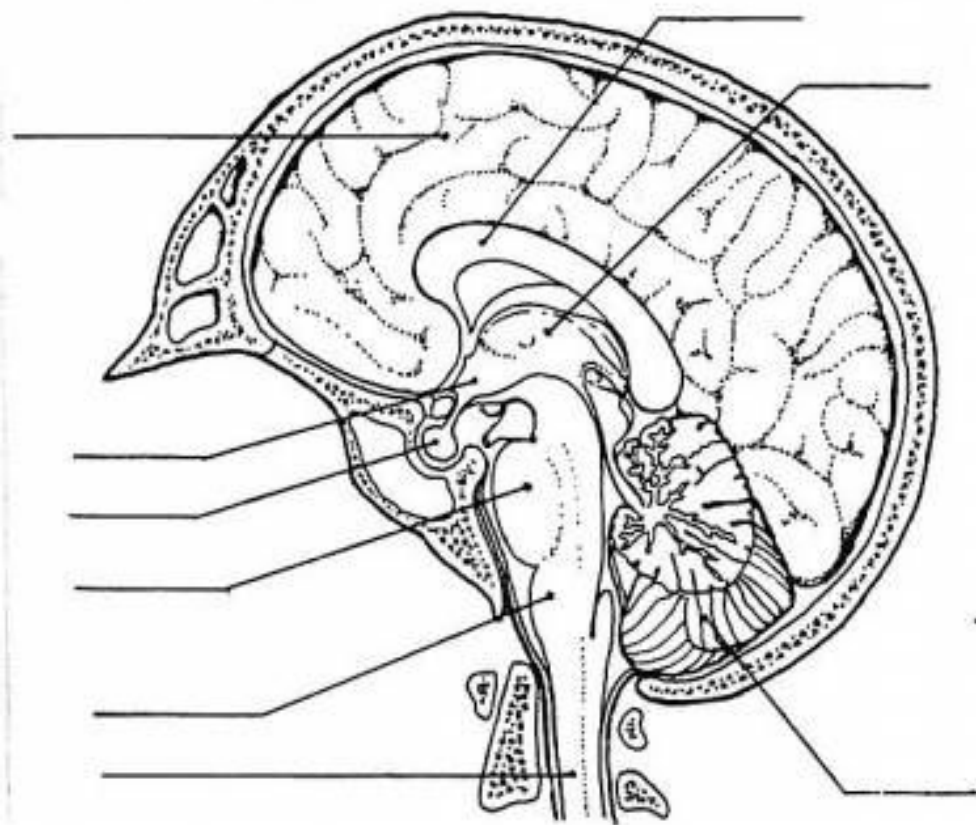
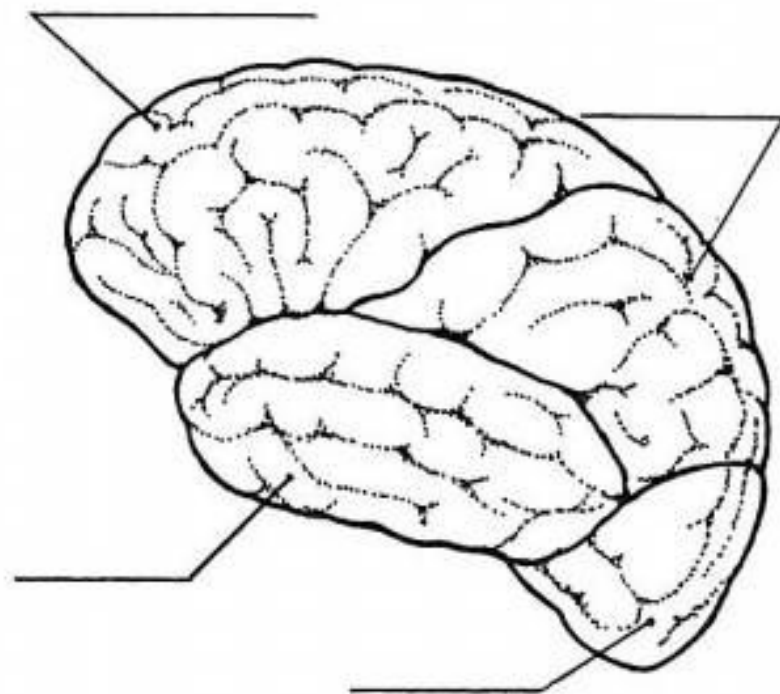
Punisher

Something received

Something removed

Positive Punishment

Negative Punishment



Word Bank

Frontal Lobe
Occipital Lobe
Temporal Lobe
Parietal Lobe
Cerebellum
Corpus Callosum
Pons
Pituitary Gland
Thalamus
Spinal Cord
Hypothalamus