AP Psychology Brain Choice Project

Credit: Amy Ramponi, Kimberly HS, WI

Counts as a Test grade. DUE DATE: Monday, Oct. 24

You will have a few options to choose from for this project, but all work must be:

- 1. Turned in on time.
- 2. Original work, but you may work with ONE partner if you choose.
- 3. Neatly done, of high quality, and explained thoroughly.

Option 1: Brain Super Heroes

You are to make up a superhero, villain, or sidekick for the following areas of the human brain. What would that character have as their special power and or special weakness if that part of their brain was "super?" By the end you should have 16 separate characters.

1.	Medul	la
		. ~

7. Amygdala

13. Sensory Cortex

2. Pons

8. Occipital Lobe

14. Broca's Area

3. Cerebellum

9. Temporal Lobe

15. Wernicke's Area 16. Corpus Callosum

4. Thalamus

10. Parietal Lobe

. . .

5. Hypothalamus6. Hippocampus

11. Frontal Lobe

12. Motor Cortex

What will my finished product look like?

You will need the following:

- Character name (CANNOT be the trademarked name of any superheroes you find online)
- Picture/Drawing of that character in his/her full costume
- A summary of what this character is all about and what their part of the brain is responsible.
- The summary should be typed; the drawing should be on card stock.
 - Characters should be submitted in full-color, neatly constructed, and of high quality.
 - You will not be judged on your artistic talent, but rather the quality of your thought process.



Example: (The image is of Thalia, who represents the thalamus—she's the messenger of the group.)

Pons Man – Pons man has extreme relaxation abilities. Whenever he feels stress, all he has to do is think of relaxing and he's chill. This is really helpful in extreme situations where his nemesis, Dr. Amygdala, is after him. The pons is responsible for relaxation and relaying information from the two sides of the body. *Project adapted from Justin Galusha, found at http://www.mrgalusha.org/about-us.html*

Option 2: The Random Brain Project

Your assignment is to use objects that you already have (i.e. cannot go out and buy) and no longer need (more or less) to create a brain that represents the functionality of the brain structures. The rules:

- 1. Each brain part listed below must be represented.
- 2. All objects must be things you have already and don't need any more...you may not buy anything.
- 3. The object used to represent each part of the brain must have a similar function as the part of the brain it represents, for example: The Reticular Formation is linked to arousal. Like an AA battery is linked to energizing something.
- 4. All pieces must be connected and displayed together in a 3-D fashion, either free-standing or suspendable from the ceiling of my classroom. (So it cannot weigh 100 pounds.)
- 5. You must include a key to your brain that labels each item in the brain, what it represents, and the connection between the two in terms of function. Your key must be typed.

1.	Medulla
2.	Pons

- 3. Cerebellum
- 4. Thalamus
- 5. Hypothalamus
- 6. Hippocampus

- 7. Amygdala
- 8. Occipital Lobe
- 9. Temporal Lobe
- 10. Parietal Lobe
- 11. Frontal Lobe
- 12. Motor Cortex

- 13. Somatosensory Cortex
- 14. Boca's Area
- 15. Wernicke's Area
- 16. Corpus Callosum

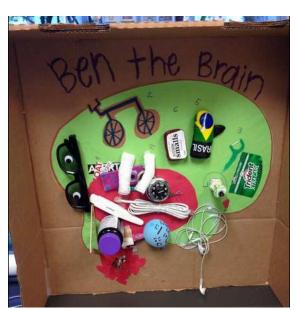


Photo credit: @dariaschaffeld

Option 3: Brain "Memes & Music" Assignment

In order to successfully learn all the parts of the brain, you need to actively process what that brain part does, its role in behavior, and how it relates to you. What better way than through the power of music and art? For each of the following brain parts, pick a song that adequately describes the *function* of that brain part and tell me why this is a good song to help you remember that part, OR create a meme that makes the function of that part clear. You must include EIGHT songs AND EIGHT memes. Example:

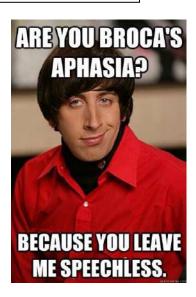
Brain Part:	Function:	Song/Artist:	Why?
Hypothalamus	Feeding, Fleeing, Fighting, Sex Drive, Homeostasis, and body temperature	"Hot and Cold" by Katy Perry	This song is about love & lust (the sex drive) and it also mentions a person being hot and cold – so it reminded me of the hypothalamus,
			which controls body
			temperature.

The following brain parts are **required** to complete this assignment:

1.	Medulla	7. Amygdala	13. Somatosensory Cortex
2.	Pons	8. Occipital Lobe	14. Broca's Area
3.	Cerebellum	9. Temporal Lobe	15. Wernicke's Area
4.	Thalamus	10. Parietal Lobe	16. Corpus Callosum
5.	Hypothalamus	11. Frontal Lobe	
6.	Hippocampus	12. Motor Cortex	

You need not actually make a CD, though you can if you want to.

Use a meme generator (like the one found here: https://imgflip.com/memegenerator) to create your ORIGINAL memes.



Option 4: Zombie Menu

For this option you will design a menu for a restaurant for zombies. As you know, zombies are fond of eating brains, and your goal is to create mouth-watering brain dishes for them to enjoy. Your menu must be typed when it's submitted, but you can draw the dishes digitally or by hand.

The name of your restaurant should be prominent on the menu page and the name of the restaurant must be creative - think of a name that would be attractive to zombies.

Each of your dishes must reflect a different part of the brain and be creatively named. Some ideas: Frontal Lobe Fries, Broca's Area Burger, etc.



Be sure the name matches the function of the brain part as well. Each of the dishes must include something about the function of that part, and will need to be described in an attractive way so that a zombie will look forward to the dish – that is, don't just mention that you are serving pituitary lobe, but perhaps "grilled pituitary that grows in your plate over a bed of sautéed jasmine rice." The following parts must be featured on your menu. Include pictures of each dish.

Medul	10

- 7. Amygdala

2. Pons

4.

3.

10. Parietal Lobe

Thalamus

11. Frontal Lobe

5. Hypothalamus

Cerebellum

6. Hippocampus

- 8. Occipital Lobe

9. Temporal Lobe

12. Motor Cortex

13. Somatosensory Cortex

14. Broca's Area

15. Wernicke's Area

16. Corpus Callosum

This project adapted, with permission, from Steve Jones, City of Medicine Academy. Steve can be contacted at @highschoolpscyh or through his Teaching High School Psychology blog.

