**AP PSYCHOLOGY 2022-23 September 27, 2022**

**Today’s Agenda (Day 29)**

1. HOMEWORK CHECK

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1. Class Activity:

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🡪**DAY 5**: Unit 3 PPT Review

1. **Module 10 – The nervous and endocrine systems**
2. **Module 11 – Studying the brain, and older brain structures**
3. Module 12 – The cerebral cortex
4. Module 13 – Brain hemisphere organization and the biology of consciousness
5. Module 14 – Behavior genetics: predicting individual differences
6. Module 15 – Evolutionary psychology: understanding human nature

HOMEWORK:

* READ: Unit 3 – Biological Basis of Behavior
* COMPLETE: Brain Project Activities [Brain Songs & Wearable Brain]
* STUDY: Unit 3 Test

**Unit 3 – Biological Basis of Behavior**

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| --- | --- | --- | --- | --- | --- | --- | --- |
| action potential | adrenal glands | agonist | all-or-none response | amygdala | antagonist | association areas | autonomic nervous system |
| axon | behavior genetics | brainstem | central nervous system | cerebellum | cerebral cortex | chromosomes | cognitive neuroscience |
| computed tomography scan | consciousness | corpus callosum | dendrites | DNA | dual processing | electroencephalogram | endocrine system |
| endorphins | environment | epigenetics | fraternal twins | frontal lobes | functional MRI | genes | genome |
| glial cells | heritability | hormones | hypothalamus | identical twins | interaction | interneurons | lesion |
| limbic system | magnetic resonance imaging | medulla | molecular genetics | motor cortex | motor neurons | mutation | myelin sheath |
| nerves | nervous system | neurogenesis | neuron | neurotransmitters | occipital lobes | parasympathetic nervous system | parietal lobes |
| peripheral nervous system | pituitary gland | plasticity | positron emission tomography scan | reflex | refractory period | reticular formation | reuptake |
| sensory cortex | sensory neurons | somatic nervous system | split brain | sympathetic nervous system | synapse | temporal lobes | thalamus |

REMINDERS:

* **TEST:** Unit 3 **🡪 ~~Sept. 28~~ Oct. 14**
* **PROJECT PRESENTATIONS:** Week of Oct. 11

**AP PSYCHOLOGY 2022-23 CLASS REVIEW**

**Module 9-1: Fact or Falsehood?**

Read each statement and decide whether you believe it is true or false.

**T F** 1. Bumps on the skull can reveal our mental abilities and our character traits.

**T F** 2. A small amount of brain tissue from a person cannot be distinguished from that of a monkey.

**T F** 3. Neurons go through a resting-like period in between each time it fires.

**T F** 4. The human brain produces its own natural opiates that elevate mood and ease pain.

**T F** 5. The wiring system of the human nervous system dwarfs that of a powerful computer.

**Module 10-1: Fact or Falsehood?**

**T F** 1. For our nervous system to operate, it always requires directions from the brain.

**T F** 2. Jerking our hand away from a hot flame occurs before our brain tells us to feel pain.

**T F** 3. With the top of your spinal cord severed, you would not feel pain from your paralyzed body below.

**T F** 4. Neural messages tend to outlast the effects of endocrine messages.

**T F** 5. The endocrine system includes a master gland that directs certain activities in the brain.

**Module 11-1: Fact or Falsehood?**

**T F** 1. Electrically stimulating a cat’s brain at a certain point can cause the animal to cower in terror in the presence of a small mouse.

**T F** 2. Both animals and humans seem to have reward centers located in the brain.

**T F** 3. We ordinarily use only 10 percent of our brains.

**T F** 4. Our brain processes most information outside of our awareness.

**T F** 5. Damage to one area of the hypothalamus in a rat’s brain reduces eating behavior, while damaging a different area of the hypothalamus produces overeating.

**T F** 6. By observing our brain activity, researchers can tell which of 10 similar objects (hammer, drill, etc.) we are viewing.

**Module 12-1: Fact or Falsehood?**

**T F** 1. If a blind person uses one finger to read Braille, the brain area dedicated to that finger expands.

**T F** 2. Adult humans cannot generate new brain cells.

**T F** 3. Your toes use more of your brain area than your lips.

**T F** 4. Some parts of your brain won’t trigger an observable response if it is triggered by electricity.

**T F** 5. Damaging the back of your brain makes you more inhibited.

**T F** 6. Once the brain is damaged, other parts of the brain can take over the function of the damaged parts.

**Module 13-1: Fact or Falsehood?**

**T F** 1. Some people have had the hemispheres of their brains split with no apparent

ill effect.

**T F** 2. Hearing people usually use the left hemisphere of the brain to process

language, and deaf people usually use the left hemisphere to read signs.

**T F** 3. Left-handedness is more common among musicians, mathematicians, and professional baseball players.

**T F** 4. Studies have shown that some comatose patients show brain activity for activities that they imagine they are doing.

**T F** 5. People with damage to their visual areas in the brain cannot see anything at all

**Module 14-1: Fact or Falsehood?**

**T F** 1. People everywhere return favors.

**T F** 2. The DNA in chimpanzees is 99.4 percent the same as that in humans.

**T F** 3. Even complex human traits are determined by a single gene.

**T F** 4. Fraternal twins are genetically no more similar than ordinary brothers and

sisters.

**T F** 5. Adoptees’ traits such as extraversion and agreeableness bear more

similarities to their adoptive parents than to their biological parents.

**T F** 6. Child neglect and abuse and even parental divorce are rare in adoptive homes.

**Module 15-1: Fact or Falsehood?**

**T F** 1. A wild animal can be easily tamed.

**T F** 2. After a catastrophe that left only Icelanders and Kenyans as survivors, the world would experience a drastic reduction in genetic diversity.

**T F** 3. Women are less choosy when it comes to picking mates – they seek mates who are most likely to help them have children.

**T F** 4. Changing gender roles have lead to brute strength being less important than having power or status in a society.

**T F** 5. People with religious faith never believe that evolution is correct.

**AP PSYCHOLOGY 2020-21 Class Activity**

**Module 11**

**Student Activity: Case Studies in Neuroanatomy**

**Case Studies**

**Instructions**: Three situations are described below. In each case, describe the parts of the brain activated in that situation.

**#1:** Anne, the landscape artist, is standing at her easel, painting with her right hand as she looks out the window at her garden. She’s listening to classical music as she paints.

**#2:** Crazy Eddie, the professional wrestler, is in the ring wrestling. The crowd is yelling and his opponent is taunting him. Eddie yells back at his opponent. The two of them are out of breath and sweating profusely. They continue their well-orchestrated series of wrestling moves.

**#3:** Jill is a student studying for a test. She is reading about violent behavior in males. She is snacking on popcorn and drinking soda.

**Module 12**

**Teacher Demonstration: Neuroscience and Moral Judgments**

**Instructions**: Contemplate this dilemma that the Princeton research team encountered:

It’s wartime and you are hiding in the basement with a group of townspeople. Enemy soldiers are outside. Your baby starts to cry loudly; if nothing is done, the soldiers will find you and kill everyone including the baby. The only way to prevent this loss of life is to cover the baby’s mouth; if you do, the baby will smother.

**What should you do? Explain your course of action.**

**Module 13**

**Handout 13-2 The Wagner Preference Inventory**

**Instructions**: Read the statements carefully. There are 12 groups of 4 statements each. Place an “X” in the bracket in front of each item you select. Mark one item only under each of the 12 numbered items. Choose the activity you prefer even though it does not necessarily mean that you have the ability to do it. If you are undecided, make a decision anyway by guessing.

1.

( ) a. Major in logic

( ) b. Write a letter

( ) c. Fix things at home

( ) d. Major in art

2.

( ) a. Be a movie critic

( ) b. Learn new words

( ) c. Improve your skills in a game

( ) d. Create a new toy

3.

( ) a. Improve your strategy in a game

( ) b. Remember people’s names

( ) c. Engage in sports

( ) d. Play an instrument by ear

4.

( ) a. Review a book

( ) b. Write for a magazine

( ) c. Build new shelves at home

( ) d. Draw a landscape or seascape

5.

( ) a. Analyze market trends

( ) b. Write a movie script

( ) c. Do carpentry work

( ) d. Imagine a new play

6.

( ) a. Analyze management practices

( ) b. Locate words in a dictionary

( ) c. Put jigsaw puzzles together

( ) d. Paint in oil

7.

( ) a. Be in charge of computer programming

( ) b. Study word origins and meaning

( ) c. Putter in the yard

( ) d. Invent a new gadget

8.

( ) a. Analyze production costs

( ) b. Describe a new product in words

( ) c. Sell a new product on the market

( ) d. Draw a picture of a new product

9.

( ) a. Explain the logic of a theory

( ) b. Be a copy writer for ads

( ) c. Work with wood and clay

( ) d. Invent a story

10.

( ) a. Be a comparison shopper

( ) b. Read about famous men and women

( ) c. Run a traffic control tower

( ) d. Mold with clay and putty

11.

( ) a. Analyze your budget

( ) b. Study literature

( ) c. Visualize and re-arrange furniture

( ) d. Be an artist

12.

( ) a. Plan a trip and make a budget

( ) b. Write a novel

( ) c. Build a house or shack

( ) d. Make crafts your hobby

**Module 15**

**Handout 15-2**

Rate the following characteristics in terms of their importance to you in choosing a mate. Use the following scale: 3 = indispensable 2 = important but not indispensable 1 = desirable but not important 0 = irrelevant

\_\_\_\_\_\_ 1. ambition and industriousness

\_\_\_\_\_\_ 2. chastity (no previous experience in sexual intercourse)

\_\_\_\_\_\_ 3. dependable character

\_\_\_\_\_\_ 4. desire for home and children

\_\_\_\_\_\_ 5. education and intelligence

\_\_\_\_\_\_ 6. emotional stability and maturity

\_\_\_\_\_\_ 7. favorable social status or rating

\_\_\_\_\_\_ 8. good cook and housekeeper

\_\_\_\_\_\_ 9. good financial prospect

\_\_\_\_\_\_ 10. good health

\_\_\_\_\_\_ 11. good looks

\_\_\_\_\_\_ 12. mutual attraction—love

\_\_\_\_\_\_ 13. pleasing disposition

\_\_\_\_\_\_ 14. refinement, neatness

\_\_\_\_\_\_ 15. similar education

\_\_\_\_\_\_ 16. similar religious background

\_\_\_\_\_\_ 17. similar political background

\_\_\_\_\_\_ 18. sociability