Anatomy Test 3 Study Guide

1. Function of the nervous system. (179)
2. Difference between central and peripheral nervous system. What makes each up. (180)
3. Difference between neurons and neuroglia. (181)
4. Role of dendrites, axons, and synapse in neurons. (183)
5. Difference between polarized and depolarized when impulse is conducted. (186-187)
6. Three layers that protect the spinal cord.
7. Difference between ascending and descending tracts. (192)
8. Difference between sympathetic and parasympathetic division of autonomic nervous system. (214)
9. What are parts of the brainstem? What is the role of medulla oblongata? (201)
10. What are the 4 major parts of the brain? Which is largest?
11. Where does cerebrospinal fluid flow and what does it do?
12. What is the role of cerebellum? (201)
13. What are parts of diencephalon? What does each do? (202)
14. What are 4 lobes of cerebrum and major function of each? (203)
15. What is the common name of the limbic system? What are the two parts? (204)

16. What are five types of receptors and what do they detect? (228)
17. What are the chemoreceptor cells in the nose called? (232)
18. What are the major parts of the ear?
19. What portion of the ear helps with balance? (234)
20. Which part of the eye sends information to the brain? Detects light? Adjusts diameter of pupil? Admits light? (239)
21. What fluid fills the anterior cavity of the eye? The posterior? (240)
22. How does the pupil respond to light? The lens? (243)
23. What are the photoreceptors in the retina? (244)
24. Similarities and differences between nervous and endocrine system (252)
25. Main function and location of pituitary gland (256), adrenal glands (259), pineal gland (260), thymus (260), thyroid (261, 264), parathyroid (262, 264), pancreas (266), gonads (269)

Anatomy CER Paragraphs (Claim, Evidence, Reasoning)

For your 2 paragraphs on Mystery Disease #2, you will make a **Claim** about what is causing the headaches, provide 2 pieces of **Evidence (1 per paragraph)**, and for each piece of evidence provide your **Reasoning**. Each paragraph should be at least 5 sentences each. You will present one piece of evidence for each body paragraph and then explain why that evidence supports your claim that the brain tumor is causing the headaches.

As you write, remember to use good scientific vocabulary and reference the data and answers to questions that you have been keeping as well as anything from the disease articles to help you. You do not have to use any official referencing format, simply reference the articles as by their titles. Use an organizer to help organize your thoughts!

Science Explanation (CER) Student Rubric

	4 (Strong)	3 (Good)	2 (Fair)	1 (Weak)	0 (missing)
Claim (Thesis or Topic Sentence)	• The claim clearly and correctly answers the question. • Claim does not include explanation.	• The claim correctly answers the question but is not clear. • The claim includes a brief explanation.	• The claim is not completely correct. • The claim includes a lengthy explanation.	• The claim is incorrect or unclear. • The claim seems to ramble on.	No Claim
Evidence	• All evidence is relevant data or observations from an experiment or scientific investigation. • Experiment is briefly described to provide context. • Multiple pieces of evidence are used to back up the claim. • All data are specific and accurate.	• Most evidence is relevant data or observations from an experiment or scientific investigation. • Experiment is described, but in too much detail. • One piece of additional evidence is needed to back up the claim. • Data are accurate but not specific.	• Some evidence is relevant data or observations from an experiment or scientific investigation. • Experiment is briefly described, but not in enough detail. • More pieces of evidence are needed to back up the claim. • Data are specific but not accurate.	• Evidence is not relevant data or observations from an experiment or scientific investigation or not relevant. • Experiment is not described. • Many more pieces of evidence are needed to back up the claim. • Data are neither specific nor accurate.	No Evidence
Reasoning (Analysis)	• Explicit reasoning is provided that links all evidence to the claim. • Scientific principles are correctly explained to show how and why the evidence supports the claim. • The claim is clearly referenced throughout the reasoning.	• Reasoning links most pieces of evidence to the claim. • Scientific principles are correctly explained but need more detail. • The claim is referenced, but not throughout the reasoning.	• Reasoning links some evidence to the claim. • Scientific principles are explained but slightly incorrect. • The claim is referenced, but not clearly.	• Reasoning is weak and does not make a connection between the evidence and the claim. • Scientific principles are not explained or explained incorrectly. • The claim is not referenced.	No Reasoning
Overall	• All parts of the prompt are answered. • Science vocabulary words are used appropriately and correctly. • Appropriate Science tone (impersonal passive tone). • The organization of the response is logical (claim comes first, then evidence and reasoning). • Uses transitions to improve the flow of the writing. • There are no spelling, grammar, or punctuation issues that hinder meaning.	• Most parts of the prompt are answered. • Science vocabulary words are used, but slightly incorrectly. • Tone is mostly scientific. • The order of the response is mostly logical. • Uses some transitions to improve the flow of the writing. • The paragraph is mostly free of spelling, grammar, and punctuation problems.	• Some parts of the prompt are answered. • Few science vocabulary words are used correctly. • Tone is scientific except for pronouns like "we," "you," or "I." • The order of the response is somewhat logical. • Uses few transitions to improve the flow of the writing. • The paragraph has several spelling, grammar, and punctuation problems.	• Little of the prompt is answered. • Science vocabulary words are not used or are used incorrectly. • Tone is unscientific. • The order of the response is not logical. • The flow of the writing is choppy and needs transitions. • Spelling and punctuation problems make it challenging to understand the paragraph.	The prompt is not answered. It is impossible to understand the response.