|  |
| --- |
| Quiz 1-Development |

|  |  |  |
| --- | --- | --- |
| **Question 1** |  | 1 / 1 point |

Vanishahas been a taxi driver for the past 20 years. She has more connections between neurons in her brain devoted to spatial memory than the average person. How can this be explained?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | |  | A) | She received lots of stimulation during her sensitive period for spatial memory in the first year she began driving taxis. |
|  | |  | B) | She received lots of stimulation during her critical period for spatial memory in childhood. |
|  | |  | C) | She has received lots of experience-expectant brain growth. |
| orrect Response | |  | D) | She has received lots of experience-dependent brain growth. |
| [[https://avenue.cllmcmaster.ca/d2l/img/0/Shared.Main.actShow.gif?v=9.4.1000.80-4](javascript://)View Feedback](javascript://) | | | |

|  |  |  |
| --- | --- | --- |
| **Question 2** |  | 1 / 1 point |

According to the definition of development presented in the web modules, someone studying development in an alien species would attempt to:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | |  | A) | Record all the changes in gene/environment interactions in the species over time. |
| orrect Response | |  | B) | Record all the characteristics that change and stay the same from conception – death. |
|  | |  | C) | Measure all the specific developmental changes in an individual from conception – death. |
|  | |  | D) | Study the biologically timed unfolding of changes within an individual from conception – death. |
| [[https://avenue.cllmcmaster.ca/d2l/img/0/Shared.Main.actShow.gif?v=9.4.1000.80-4](javascript://)View Feedback](javascript://) | | | |

|  |  |  |
| --- | --- | --- |
| **Question 3** |  | 1 / 1 point |

A pointy nose is the dominant trait, and a round nose is the recessive trait. Philip’s parents both have round noses, and Kim’s parents are both heterozygous with pointy noses. What is the probability that Philip and Kim’s children will have a round nose if Kim herself has a round nose?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | |  | A) | 50%. |
|  | |  | B) | 25%. |
| orrect Response | |  | C) | 100%. |
|  | |  | D) | 75%. |
| [[https://avenue.cllmcmaster.ca/d2l/img/0/Shared.Main.actShow.gif?v=9.4.1000.80-4](javascript://)View Feedback](javascript://) | | | |

|  |  |  |
| --- | --- | --- |
| **Question 4** |  | 0 / 1 point |

Which of the following correctly exemplifies the **range of reaction principle?**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| orrect Answer | |  | A) | Daniel inherited genes that enhance his tennis abilities, and with proper training, he has the ability to become a professional tennis player. |
|  | |  | B) | Paul inherited a severe genetic disorder that prevents the proper development of his lower limbs. |
|  | |  | C) | Despite being exposed to songs from other species, birds always learn the song of their own species. |
| ncorrect Response | |  | D) | As a child, Stephanie noticed that she and her friends preferred the taste of sugary candy to bitter vegetables. |
| [[https://avenue.cllmcmaster.ca/d2l/img/0/Shared.Main.actShow.gif?v=9.4.1000.80-4](javascript://)View Feedback](javascript://) | | | |

|  |  |  |
| --- | --- | --- |
| **Question 5** |  | 1 / 1 point |

Gertrude has a high-pitched voice, while her sister, Jana, has a low-pitched voice. Assume that the allele for a high-pitched voice (H) is dominant over the allele for a low-pitched voice (h), and that the trait follows a simple dominant-recessive inheritance pattern. Which of the following statements would be **FALSE?**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| orrect Response | |  | A) | The only genotype that either of Gertrude and Jana’s parents could have is the Hh genotype. |
|  | |  | B) | Jana could only have an hh genotype. |
|  | |  | C) | Both Gertrude and Jana have different genotypes and phenotypes. |
|  | |  | D) | Gertrude could have either a HH genotype or an Hh genotype. |
| [[https://avenue.cllmcmaster.ca/d2l/img/0/Shared.Main.actShow.gif?v=9.4.1000.80-4](javascript://)View Feedback](javascript://) | | | |

|  |  |  |
| --- | --- | --- |
| **Question 6** |  | 0 / 1 point |

Nahili wants to test whether high-pitch noise increases the activation of a specific cell she has identified as Neuron A. If she runs an event-related potential study, which of the following would most likely be true regarding the higher activation of **Neuron A?**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | |  | A) | There would be higher activation in an electrode near the temporal lobe because Neuron A would be activated. |
| ncorrect Response | |  | B) | There would be higher activation in many electrodes near the temporal lobe because of the vast increase in activation of Neuron A. |
|  | |  | C) | There would be higher activation in an electrode near the occipital lobe because Neuron A would be activated. |
| orrect Answer | |  | D) | She cannot conclude anything about the activation of Neuron A using an event-related potential study. |
| [[https://avenue.cllmcmaster.ca/d2l/img/0/Shared.Main.actShow.gif?v=9.4.1000.80-4](javascript://)View Feedback](javascript://) | | | |

|  |  |  |
| --- | --- | --- |
| **Question 7** |  | 1 / 1 point |

Jasmine is investigating whether infants possess an innate attraction to complex objects, such as faces, versus simple objects, such as geometric shapes. Which of the following methods of studying development should Jasmine employ?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | |  | A) | Low amplitude sucking method. |
|  | |  | B) | Habituation procedure. |
|  | |  | C) | Event related potentials. |
| orrect Response | |  | D) | Preference method. |
| [[https://avenue.cllmcmaster.ca/d2l/img/0/Shared.Main.actShow.gif?v=9.4.1000.80-4](javascript://)View Feedback](javascript://) | | | |

|  |  |  |
| --- | --- | --- |
| **Question 8** |  | 1 / 1 point |

Which of the following statements would **NOT** describe the Interactionist Perspective of development?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | |  | A) | Rammjot grows to be an above average height, which helps her to be an even better basketball player. |
| orrect Response | |  | B) | Azim is born prematurely, and as a result experiences several significant health issues throughout his life. |
|  | |  | C) | Billy is born with a cataract in one of his eyes, severely impairing his vision and making it more difficult to learn how to walk. |
|  | |  | D) | Heather inherits her mother’s strong musical abilities and begins taking piano lessons at a young age, eventually becoming a concert pianist. |
| [[https://avenue.cllmcmaster.ca/d2l/img/0/Shared.Main.actShow.gif?v=9.4.1000.80-4](javascript://)View Feedback](javascript://) | | | |

|  |  |  |
| --- | --- | --- |
| **Question 9** |  | 1 / 1 point |

Tian and her twin sister Linh came from the same sperm and ovum. However, both twins were put up for adoption and grew up in very different homes. Dr. Chen is interested in examining how similar Tian and Linh score on an intelligence test. Which of the following is most likely?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | |  | A) | Since these twins were raised apart, they will likely show little to no correlation between their intelligence test scores. This fits with prior research showing that the environment is more important than genetic factors in determining intelligence. |
| orrect Response | |  | B) | Despite being raised apart, Tian and Linh will likely show a high correlation between their intelligence test scores, but probably not as high as if they were raised together. This indicates the interaction between genetic and environmental influences. |
|  | |  | C) | Because Dr. Chen is a behaviourist, he expects the behaviour of both Tian and Linh to be very similar, as they share 100% of their genes. He does in fact find that the twins show a high correlation between their intelligence test scores. |
|  | |  | D) | Because Tian’s and Linh’s biological parents were both extremely intelligent individuals, both twins will show above average performance on the intelligence test administered. |
| [[https://avenue.cllmcmaster.ca/d2l/img/0/Shared.Main.actShow.gif?v=9.4.1000.80-4](javascript://)View Feedback](javascript://) | | | |

|  |  |  |
| --- | --- | --- |
| **Question 10** |  | 1 / 1 point |

If we assume that appearance of a cow’s colouring follows a simple co-dominance inheritance pattern from a single gene pair, which of the following is true of Mona, a cow who is white and black spotted cow?

|  |  |  |  |
| --- | --- | --- | --- |
|  |  | A) | If Mona’s parents were both white and black, she had a 100% chance of having the spotted phenotype. |
| orrect Response |  | B) | If Mona’s mother is white and Mona’s father is black, Mona had a 100% chance of being a spotted cow. |
|  |  | C) | If Mona’s mother is a white and black and Mona’s father is black, she had a 3 in 4 chance of looking like her mother. |
|  |  | D) | Mona’s parents must both be white and black in order exhibit this phenotype. |

|  |
| --- |
| Live Lecture Questions |

|  |  |  |
| --- | --- | --- |
| **Question 1** |  | 1 / 1 point |

As discussed in Live Lectures, which of the following best explains the results of studies examining the relationship between familiarity and the likelihood of agreeing to have sex?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| orrect Response | |  | A) | Although men are more willing than women to agree to sex with an unfamiliar partner, both approach similar levels of agreement with a partner who is very familiar. |
|  | |  | B) | Although women are more willing than men to agree to sex with an unfamiliar partner, both approach similar levels of agreement for a partner who is very familiar. |
|  | |  | C) | Although men and women are equally willing to agree to sex with an unfamiliar partner, men and women reach different levels of agreement for a partner who is very familiar. |
|  | |  | D) | Men and women are equally willing to agree to sex with an unfamiliar partner and reach similar levels of agreement for a partner who is very familiar. |
| [[https://avenue.cllmcmaster.ca/d2l/img/0/Shared.Main.actShow.gif?v=9.4.1000.80-4](javascript://)View Feedback](javascript://) | | | |

|  |  |  |
| --- | --- | --- |
| **Question 2** |  | 1 / 1 point |

The Hadza are a hunter-gather community that has not been affected by media pressures and socialization.  As such, they represent an excellent group of individuals to study evolved psychological mechanisms. When researchers tested the influence of male voice pitch on reproductive success, what did they find?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| orrect Response | |  | A) | Males with lower pitched voices had more offspring. |
|  | |  | B) | Males with lower pitched voices committed more extreme acts of aggression. |
|  | |  | C) | Males with higher pitched voices had more offspring. |
|  | |  | D) | Males with lower pitched voices took greater care of the offspring of closely related males. |
| [[https://avenue.cllmcmaster.ca/d2l/img/0/Shared.Main.actShow.gif?v=9.4.1000.80-4](javascript://)View Feedback](javascript://) | | | |

|  |
| --- |
| Web Module Questions |

|  |  |  |
| --- | --- | --- |
| **Question 3** |  | 1 / 1 point |

Antlers on male elk are an example of a**sexually selected trait**. Which of the following is **TRUE** regarding this trait?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| orrect Response | |  | A) | Large antlers allow the individual to eliminate competition for mates through physical combat. |
|  | |  | B) | Large antlers have a positive effect on survival since they act as a weapon on predators. |
|  | |  | C) | Large antlers make male elk more attractive to potential mates. |
|  | |  | D) | Large antlers are present year-round because they increase the fitness of those individuals. |
| [[https://avenue.cllmcmaster.ca/d2l/img/0/Shared.Main.actShow.gif?v=9.4.1000.80-4](javascript://)View Feedback](javascript://) | | | |

|  |  |  |
| --- | --- | --- |
| **Question 4** |  | 1 / 1 point |

Which of the following giraffes would have the highest **Darwinian Fitness**?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| orrect Response | |  | A) | Sandro the Giraffe, who despite being the smallest of the group, sneakily mates with multiple female giraffes without being detected. |
|  | |  | B) | Omid the Giraffe, whose large size leads him to be leader of the group, but gets him killed by a lion before he is able to reproduce. |
|  | |  | C) | Raoul the Giraffe, whose symmetrical spots impress the females, allowing him to choose the best female giraffe as his partner for life. |
|  | |  | D) | Gerry the Giraffe, who uses his long neck to fend off any rival males who might try to mate with his sole life partner. |
| [[https://avenue.cllmcmaster.ca/d2l/img/0/Shared.Main.actShow.gif?v=9.4.1000.80-4](javascript://)View Feedback](javascript://) | | | |

|  |  |  |
| --- | --- | --- |
| **Question 5** |  | 0 / 1 point |

Which of the following is **NOT**one of the essential components of Darwin’s proposal for the theory of natural selection?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ncorrect Response | |  | A) | There is variation of characteristics amongst individuals in the population. |
|  | |  | B) | Traits that affect survival and reproduction are heritable. |
|  | |  | C) | Differences between individuals affect the likelihood of surviving and reproducing. |
| orrect Answer | |  | D) | Traits that influence an organism’s ability to obtain a mate are heritable through sexual selection. |
| [[https://avenue.cllmcmaster.ca/d2l/img/0/Shared.Main.actShow.gif?v=9.4.1000.80-4](javascript://)View Feedback](javascript://) | | | |

|  |  |  |
| --- | --- | --- |
| **Question 6** |  | 1 / 1 point |

Yan has packed himself too much food for lunch. According to evolutionary theory, Yan is most likely to share his food with...

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| orrect Response | |  | A) | Someone at work who smells like his brother. |
|  | |  | B) | Someone at work who reminds him of his childhood. |
|  | |  | C) | Someone at work who looks like a friend of his. |
|  | |  | D) | Someone at work who looks like his girlfriend. |
| [[https://avenue.cllmcmaster.ca/d2l/img/0/Shared.Main.actShow.gif?v=9.4.1000.80-4](javascript://)View Feedback](javascript://) | | | |

|  |  |  |
| --- | --- | --- |
| **Question 7** |  | 1 / 1 point |

Which of the following examples does **not** fit with the listed behaviour?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | |  | A) | Habitat-Preference – studying the nests of a specific type of duck. |
| orrect Response | |  | B) | Typography – studying migration times of a species of robins. |
|  | |  | C) | Social systems – studying the reproductive cycles of many individuals in a species of bears. |
|  | |  | D) | Group-Size – studying the disabilities that arise from social withdrawal in humans. |
| [[https://avenue.cllmcmaster.ca/d2l/img/0/Shared.Main.actShow.gif?v=9.4.1000.80-4](javascript://)View Feedback](javascript://) | | | |

|  |  |  |
| --- | --- | --- |
| **Question 8** |  | 0 / 1 point |

A homogeneous population of 4 leaf clovers is growing in Mitchell’s backyard. It is autumn now and leaves have fallen and covered all of the clovers. Without sunlight, the clovers will die. What is likely to happen to the clovers?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ncorrect Response | |  | A) | Natural selection will act upon the clover population so that the tallest clovers will survive and reproduce. |
|  | |  | B) | Clovers with an adaptive advantage will survive and natural selection will act upon these clovers. |
| orrect Answer | |  | C) | All of the clovers in Mitchell’s backyard will die unless the leaves are removed from on top of them. |
|  | |  | D) | Individual differences result in differential survivability allowing some clovers to survive and reproduce. |
| [[https://avenue.cllmcmaster.ca/d2l/img/0/Shared.Main.actShow.gif?v=9.4.1000.80-4](javascript://)View Feedback](javascript://) | | | |

|  |  |  |
| --- | --- | --- |
| **Question 9** |  | 1 / 1 point |

Leon is participating in a laboratory experiment consisting of a one-time investment game similar to that in the DeBruine experiments. He decides to trust his partner to split a larger sum of money equally. Leon’s partner does split the money equally with Leon. Which of the following best characterizes Leon’s and his partner’s actions?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| orrect Response | |  | A) | Leon acted expecting direct reciprocity, while his partner acted cooperatively. |
|  | |  | B) | Leon acted expecting direct reciprocity, while his partner acted altruistically. |
|  | |  | C) | Leon acted expecting indirect reciprocity, facilitated by his reputation for being trusting, while his partner acted altruistically. |
|  | |  | D) | Leon acted expecting indirect reciprocity, facilitated by his reputation for being trusting, while his partner acted cooperatively. |
| [[https://avenue.cllmcmaster.ca/d2l/img/0/Shared.Main.actShow.gif?v=9.4.1000.80-4](javascript://)View Feedback](javascript://) | | | |

|  |  |  |
| --- | --- | --- |
| **Question 10** |  | 0 / 1 point |

A population of 15 robins are all looking for worms to eat, but are concerned about cats nearby that may be looking to prey on the robins. Which of the following would be true if the population of robins grew to 30 birds?

|  |  |  |  |
| --- | --- | --- | --- |
| orrect Answer |  | A) | Each robin would spend less time keeping watch for predatory cats compared to the population of 15 birds. |
| ncorrect Response |  | B) | Each robin would spend less time looking for worms to eat compared to the population of 15 birds. |
|  |  | C) | The group of robins as a whole would spend less time looking for worms to eat compared to the population of 15 birds. |
|  |  | D) | The group of robins as a whole would spend less time keeping watch for predatory cats compared to the population of 15 birds. |

|  |
| --- |
| Live Lecture Questions |

|  |  |  |
| --- | --- | --- |
| **Question 1** |  | 0 / 1 point |

Which of the following is the best example of mirror neurons at work?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | |  | A) | An astronaut practicing a space-walk in the pool. |
| orrect Answer | |  | B) | A basketball player training by imagining making free-throw shots. |
| ncorrect Response | |  | C) | A Caledonian crow learning tool use from a colleague. |
|  | |  | D) | A monkey showing activity in the motor cortex while holding an apple. |
| [[https://avenue.cllmcmaster.ca/d2l/img/0/Shared.Main.actShow.gif?v=9.4.1000.80-4](javascript://)View Feedback](javascript://) | | | |

|  |  |  |
| --- | --- | --- |
| **Question 2** |  | 1 / 1 point |

You are researching the impact of dopamine reward systems on drug addiction and have scanned the brains of monkeys using positron emission tomography (PET). When looking at the results of one particular scan you notice that there is a marked reduction in the availability of dopamine receptors. Which of the following is the **best** prediction regarding the scan you are looking at?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | |  | A) | Scan is of a dominant male, who is **likely** to become addicted to drugs. |
| orrect Response | |  | B) | Scan is of a subordinate male, who is **likely** to become addicted to drugs. |
|  | |  | C) | Scan is of a subordinate male, who is **unlikely** to become addicted to drugs. |
|  | |  | D) | Scan is of a dominant male, who is **unlikely** to become addicted to drugs. |
| [[https://avenue.cllmcmaster.ca/d2l/img/0/Shared.Main.actShow.gif?v=9.4.1000.80-4](javascript://)View Feedback](javascript://) | | | |

|  |
| --- |
| Recall Web Module Questions |

|  |  |  |
| --- | --- | --- |
| **Question 3** |  | 1 / 1 point |

To reduce the amount of serotonin that is being broken down in the synapse, a doctor may prescribe which type of antidepressant medication?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | |  | A) | SSRI. |
|  | |  | B) | Tricyclics. |
|  | |  | C) | Prozac. |
| orrect Response | |  | D) | MAOI. |
| [[https://avenue.cllmcmaster.ca/d2l/img/0/Shared.Main.actShow.gif?v=9.4.1000.80-4](javascript://)View Feedback](javascript://) | | | |

|  |  |  |
| --- | --- | --- |
| **Question 4** |  | 1 / 1 point |

Which of the following allows negative ions to enter the cell causing it to hyperpolarize?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | |  | A) | An excitatory pre-synaptic potential. |
|  | |  | B) | An inhibitory pre-synaptic potential. |
| orrect Response | |  | C) | An inhibitory post-synaptic potential. |
|  | |  | D) | An excitatory post-synaptic potential. |
| [[https://avenue.cllmcmaster.ca/d2l/img/0/Shared.Main.actShow.gif?v=9.4.1000.80-4](javascript://)View Feedback](javascript://) | | | |

|  |  |  |
| --- | --- | --- |
| **Question 5** |  | 1 / 1 point |

Which of the following best exemplifies the role of glial cells and nodes of ranvier?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | |  | A) | The myelin sheath strengthens the action potential as it jumps across it, replacing some of the charge lost at the nodes of ranvier. |
| orrect Response | |  | B) | The myelin sheath increases the speed with which an action potential travels while the nodes of ranvier strengthen the signal as it travels. |
|  | |  | C) | The myelin sheath slows down the speed of the action potential but keeps the signal from degrading when it passes through the nodes of ranvier. |
|  | |  | D) | The myelin sheath that is present on the nodes of ranvier, increases the speed with which an action potential travels along an axon. |
| [[https://avenue.cllmcmaster.ca/d2l/img/0/Shared.Main.actShow.gif?v=9.4.1000.80-4](javascript://)View Feedback](javascript://) | | | |

|  |  |  |
| --- | --- | --- |
| **Question 6** |  | 0 / 1 point |

A cell divides in the ventricular zone 43 days after conception. Which of the following is true regarding the likely destinations of the cells?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | |  | A) | Both will be neurons or glial cells and will travel outward from the ventricular zone. |
| ncorrect Response | |  | B) | A founder cell will migrate outwards, and a neuron will remain in the ventricular zone. |
|  | |  | C) | Both will be founder cells and will travel outward from the ventricular zone. |
| orrect Answer | |  | D) | A founder cell will stay in the ventricular zone, and a neuron will migrate outwards. |
| [[https://avenue.cllmcmaster.ca/d2l/img/0/Shared.Main.actShow.gif?v=9.4.1000.80-4](javascript://)View Feedback](javascript://) | | | |

|  |
| --- |
| Application Web Module Questions |

|  |  |  |
| --- | --- | --- |
| **Question 7** |  | 1 / 1 point |

What would be the effect on the refractory period if a neuron’s sodium-potassium pump functioned at the same metabolic cost, yet removed 6 sodium ions from inside the cell and replaced them with 4 potassium ions?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| orrect Response | |  | A) | The neuron would have a shorter refractory period, increasing the frequency of action potentials possible. |
|  | |  | B) | The neuron would have a shorter refractory period, decreasing the frequency of action potentials possible. |
|  | |  | C) | The neuron would have a longer refractor period, increasing the frequency of action potentials possible. |
|  | |  | D) | The neuron would have a longer refractory period, decreasing the frequency of action potentials possible. |
| [[https://avenue.cllmcmaster.ca/d2l/img/0/Shared.Main.actShow.gif?v=9.4.1000.80-4](javascript://)View Feedback](javascript://) | | | |

|  |  |  |
| --- | --- | --- |
| **Question 8** |  | 1 / 1 point |

A particular neuron’s resting potential is measured to be constantly fluctuating around  -85mV. Which of the following is the best explanation for this measurement?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | |  | A) | A number of positively charged sodium ions have moved into the cell via voltage- gated sodium channels. |
|  | |  | B) | This neuron’s voltage- gated potassium channels are preventing positively charged potassium from entering the cell. |
| orrect Response | |  | C) | Positively charged potassium ions are exiting the cell at an increased rate due to hyperactive leaky potassium channels. |
|  | |  | D) | A number of negatively charged protein molecules have moved along their concentration gradient into the cell. |
| [[https://avenue.cllmcmaster.ca/d2l/img/0/Shared.Main.actShow.gif?v=9.4.1000.80-4](javascript://)View Feedback](javascript://) | | | |

|  |  |  |
| --- | --- | --- |
| **Question 9** |  | 1 / 1 point |

What would be the effect on the action potential of removing the sodium/potassium pumps?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | |  | A) | Hyperpolarization will proceed slower. |
|  | |  | B) | Depolarization will occur faster. |
| orrect Response | |  | C) | Redistribution of ions will proceed slower. |
|  | |  | D) | Redistribution of ions will proceed slower. |
| [[https://avenue.cllmcmaster.ca/d2l/img/0/Shared.Main.actShow.gif?v=9.4.1000.80-4](javascript://)View Feedback](javascript://) | | | |

|  |  |  |
| --- | --- | --- |
| **Question 10** |  | 0 / 1 point |

A child is guaranteed to inherit a form of blindness. Given what you know about neural development of the fetus, what is the most likely scenario?

|  |  |  |  |
| --- | --- | --- | --- |
|  |  | A) | After migration, cells in the visual cortex will not differentiate. |
|  |  | B) | During asymmetrical division, undifferentiated neurons for the visual cortex will migrate outward, but diverted away from the visual cortex. |
| ncorrect Response |  | C) | After differentiation, neurons in the visual cortex will not mature. |
| orrect Answer |  | D) | During asymmetrical division, undifferentiated neurons for the visual cortex will migrate outward towards the visual cortex. |

|  |
| --- |
| Live Lecture Questions |

|  |  |  |
| --- | --- | --- |
| **Question 1** |  | 0 / 1 point |

You are trying to determine if Jesse is faking a condition of hemispatial neglect from brain injury to the right parietal lobe.  Which of the following observations would you lead you to be suspicious?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ncorrect Response | |  | A) | You notice that Jesse quietly rotates his plate clockwise while eating. |
|  | |  | B) | Jesse only crosses out most of the lines on one particular side of line crossing task. |
| orrect Answer | |  | C) | When Jesse is asked to draw his bedroom layout from memory, a scene from before the accident includes both left and right sides. |
|  | |  | D) | Jesse experiences a tingling feeling on the contralateral side of his reported brain injury. |
| [[https://avenue.cllmcmaster.ca/d2l/img/0/Shared.Main.actShow.gif?v=9.4.1000.80-4](javascript://)View Feedback](javascript://) | | | |

|  |  |  |
| --- | --- | --- |
| **Question 2** |  | 0 / 1 point |

When examining the brain damage of individuals with hemispatial neglect, we typically see that their damage is located in the right parietal lobe more often than the left parietal lobe. The **best** explanation for this asymmetry of neglect is:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| orrect Answer | |  | A) | Representation of attention to body/space is not distributed equally across the two hemispheres. |
|  | |  | B) | When there is damage to the right parietal lobe, the left parietal lobe is able to compensate because it has a wider spotlight of attention. |
| ncorrect Response | |  | C) | Damage on the left side of the brain is limited to language deficits, not deficits in spatial processing. |
|  | |  | D) | The spotlight of attention is limited to the ipsilateral side of space. |
| [[https://avenue.cllmcmaster.ca/d2l/img/0/Shared.Main.actShow.gif?v=9.4.1000.80-4](javascript://)View Feedback](javascript://) | | | |

|  |
| --- |
| Recall Web Module Questions |

|  |  |  |
| --- | --- | --- |
| **Question 3** |  | 1 / 1 point |

Which of the following is **CORRECT** with regards to the advantages of particular types of neuroscience methods described?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| orrect Response | |  | A) | One advantage of single-cell recording is that it allows researches to relate brain region function to behaviour. |
|  | |  | B) | One advantage of CT scans is that it can provide fine detail of brain structures that other neuroimaging cannot. |
|  | |  | C) | One advantage of ablation studies is that they are noninvasive, because they are isolated to specific brain structures. |
|  | |  | D) | One advantage of fMRI is that it provides excellent temporal resolution. |
| [[https://avenue.cllmcmaster.ca/d2l/img/0/Shared.Main.actShow.gif?v=9.4.1000.80-4](javascript://)View Feedback](javascript://) | | | |

|  |  |  |
| --- | --- | --- |
| **Question 4** |  | 1 / 1 point |

Which of the following is **CORRECT**with regards to structures of the forebrain?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | |  | A) | The hippocampus is particularly important because it controls hormone levels released by the pituitary. |
| orrect Response | |  | B) | The thalamus acts as a relay center for various sensory modalities. |
|  | |  | C) | The amygdala contains spatial representations that help one to navigate the world. |
|  | |  | D) | Two common hormones that are released by the anterior pituitary are oxytocin and vasopressin. |
| [[https://avenue.cllmcmaster.ca/d2l/img/0/Shared.Main.actShow.gif?v=9.4.1000.80-4](javascript://)View Feedback](javascript://) | | | |

|  |  |  |
| --- | --- | --- |
| **Question 5** |  | 0 / 1 point |

Which of the following correctly describes the function of a structure found in the forebrain?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ncorrect Response | |  | A) | The thalamus acts as a relay station where axons from every sensory modality synapse and relay information. |
|  | |  | B) | The posterior pituitary gland releases stimulating hormones that regulate other endocrine glands. |
| orrect Answer | |  | C) | The hypothalamus is responsible for directing stress responses, and regulating energy, metabolism, and reproduction. |
|  | |  | D) | The amygdala creates emotional responses, and sends the sensory information to the thalamus. |
| [[https://avenue.cllmcmaster.ca/d2l/img/0/Shared.Main.actShow.gif?v=9.4.1000.80-4](javascript://)View Feedback](javascript://) | | | |

|  |  |  |
| --- | --- | --- |
| **Question 6** |  | 1 / 1 point |

Which of the following is **INCORRECT** regarding the functions of the lobes of the brain?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | |  | A) | The parietal lobe helps with spatial navigation because it contains a spatial representation of the world. |
|  | |  | B) | The frontal lobe is particularly important for the coordination of movement. |
|  | |  | C) | The occipital, temporal and parietal lobes all engage in some form of visual processing or functions. |
| orrect Response | |  | D) | Both the temporal and parietal lobes process auditory information. |
| [[https://avenue.cllmcmaster.ca/d2l/img/0/Shared.Main.actShow.gif?v=9.4.1000.80-4](javascript://)View Feedback](javascript://) | | | |

|  |
| --- |
| Application Web Module Questions |

|  |  |  |
| --- | --- | --- |
| **Question 7** |  | 1 / 1 point |

Benedict has trouble understanding certain words, but his motor skills for language production are intact. Which brain area is likely damaged in Benedict’s brain?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | |  | A) | Left frontal lobe. |
|  | |  | B) | Right frontal lobe. |
|  | |  | C) | Right temporal lobe. |
| orrect Response | |  | D) | Left temporal lobe. |
| [[https://avenue.cllmcmaster.ca/d2l/img/0/Shared.Main.actShow.gif?v=9.4.1000.80-4](javascript://)View Feedback](javascript://) | | | |

|  |  |  |
| --- | --- | --- |
| **Question 8** |  | 1 / 1 point |

Mohini is an avid ice hockey player. Unfortunately, Mohini was recently the target of a dangerous hit to the head and has suffered brain damage. The most striking of Mohini’s symptoms is the inability to visually track moving objects.Which of the following brain regions has Mohini likely damaged?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | |  | A) | Temporal Lobe. |
|  | |  | B) | Somatosensory cortex. |
| orrect Response | |  | C) | Parietal Lobe. |
|  | |  | D) | Inferior Colliculus. |
| [[https://avenue.cllmcmaster.ca/d2l/img/0/Shared.Main.actShow.gif?v=9.4.1000.80-4](javascript://)View Feedback](javascript://) | | | |

|  |  |  |
| --- | --- | --- |
| **Question 9** |  | 1 / 1 point |

A patient has obtained a head injury that has caused damage to the temporal lobe of her brain. Which of the following symptoms would be **MOST LIKELY**?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | |  | A) | Impaired motor coordination and difficulty orienting in space. |
|  | |  | B) | Erratic behaviour and difficulties in performing new tasks. |
|  | |  | C) | An inability to see, despite normal functioning of the eyes. |
| orrect Response | |  | D) | Speech impairment and mild amnesia for events occurring around the trauma. |
| [[https://avenue.cllmcmaster.ca/d2l/img/0/Shared.Main.actShow.gif?v=9.4.1000.80-4](javascript://)View Feedback](javascript://) | | | |

|  |  |  |
| --- | --- | --- |
| **Question 10** |  | 1 / 1 point |

Dr. Bennis is reading his patient’s chart and sees that the patient has suffered a lesion to the medial dorsal caudal region of the brain. Which of the following most accurately describes where that lesion is located?

|  |  |  |  |
| --- | --- | --- | --- |
|  |  | A) | The lesion is along the side of the brain near the bottom at the front of the brain. |
|  |  | B) | The lesion is along the midline of the brain near the bottom at the front of the brain. |
| orrect Response |  | C) | The lesion is along the midline of the brain near the top at the back of the brain. |
|  |  | D) | The lesion is along the side of the brain near the top at the back of the brain. |

|  |
| --- |
| Live Lecture Questions |

|  |  |  |
| --- | --- | --- |
| **Question 1** |  | 1 / 1 point |

Carrie-Anne has recently suffered a concussion and incurred temporary brain damage.  While relaxing at home one weekend she decides to finally take up knitting.  However, she finds that she is unable to learn to execute the stitches properly. Which area of Carrie-Anne’s brain is most likely damaged?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | |  | A) | Frontal lobe. |
|  | |  | B) | Amygdala. |
|  | |  | C) | Hippocampus. |
| orrect Response | |  | D) | Striatum. |
| [[https://avenue.cllmcmaster.ca/d2l/img/0/Shared.Main.actShow.gif?v=9.4.1000.80-4](javascript://)View Feedback](javascript://) | | | |

|  |  |  |
| --- | --- | --- |
| **Question 2** |  | 0 / 1 point |

According to experimental data presented in live lecture, which of the following lesion and memory task combinations listed would you expect to be related?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ncorrect Response | |  | A) | Hippocampus: running to a maze arm cued by a light. |
|  | |  | B) | Pons: running to a maze arm paired with an odour but not a light. |
|  | |  | C) | Amygdala: running to a maze arm cued by a green light but not red light. |
| orrect Answer | |  | D) | Striatum: running to a maze arm paired with cinnamon but not banana odour. |
| [[https://avenue.cllmcmaster.ca/d2l/img/0/Shared.Main.actShow.gif?v=9.4.1000.80-4](javascript://)View Feedback](javascript://) | | | |

|  |
| --- |
| Recall Web Module Questions |

|  |  |  |
| --- | --- | --- |
| **Question 3** |  | 1 / 1 point |

Which of the following accurately describes the classical conditioning component of the gill withdrawal reflex in Aplysia?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | |  | A) | Stimulation of the mantle acted as the unconditional stimulus for gill withdrawal. |
|  | |  | B) | Once the contingency was learned, the gill withdrawal reflex occurred without the stimulation of the mantle. |
| orrect Response | |  | C) | Eventually mantle stimulation acted as a predictor of the gill withdrawal reflex. |
|  | |  | D) | The conditional response was decreased responsiveness of the gill withdrawal reflex. |
| [[https://avenue.cllmcmaster.ca/d2l/img/0/Shared.Main.actShow.gif?v=9.4.1000.80-4](javascript://)View Feedback](javascript://) | | | |

|  |  |  |
| --- | --- | --- |
| **Question 4** |  | 0 / 1 point |

Which of the following is **FALSE** regarding Eric Kandel’s research on habituation?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | |  | A) | The pre synaptic neuron released fewer neurotransmitters. |
| ncorrect Response | |  | B) | The post synaptic neuron remained just as sensitive throughout the experiment. |
|  | |  | C) | The strength of the gill withdrawal reflex diminished with repeated stimulation. |
| orrect Answer | |  | D) | There was increased responsiveness to a repeated or constant stimulus. |
| [[https://avenue.cllmcmaster.ca/d2l/img/0/Shared.Main.actShow.gif?v=9.4.1000.80-4](javascript://)View Feedback](javascript://) | | | |

|  |  |  |
| --- | --- | --- |
| **Question 5** |  | 1 / 1 point |

According to your knowledge of the hippocampus, which of the following statements is true?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | |  | A) | It is responsible strictly for spatial events. |
| orrect Response | |  | B) | This region demonstrates reward-related activity. |
|  | |  | C) | The process of forming declarative memories begins here. |
|  | |  | D) | It is the final place of storage for long-term memories. |
| [[https://avenue.cllmcmaster.ca/d2l/img/0/Shared.Main.actShow.gif?v=9.4.1000.80-4](javascript://)View Feedback](javascript://) | | | |

|  |  |  |
| --- | --- | --- |
| **Question 6** |  | 1 / 1 point |

Which of the following most accurately describes the finding of researchers who studied rats raised in enriched versus impoverished environments?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | |  | A) | Rats raised in the impoverished environment showed less interest in interacting with their environment than rats raised in the enriched environment. |
|  | |  | B) | Rats raised in the impoverished environment were more responsive to stress than rats raised in the enriched environment. |
| orrect Response | |  | C) | Rats raised in the enriched environment developed a more complex neural network than rats raised in the impoverished environment. |
|  | |  | D) | Rats raised in the enriched environment had faster synaptic firing rates than rats raised in the impoverished environment. |
| [[https://avenue.cllmcmaster.ca/d2l/img/0/Shared.Main.actShow.gif?v=9.4.1000.80-4](javascript://)View Feedback](javascript://) | | | |

|  |
| --- |
| Application Web Module Questions |

|  |  |  |
| --- | --- | --- |
| **Question 7** |  | 0 / 1 point |

Rodrigo’s family has noticed that he has been experiencing some deficits in memory formation so they send him to a doctor. While at the doctor, Rodrigo is told that his magnesium block is a permanent fixture of his NMDA receptors. What is the most likely consequence of this finding?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ncorrect Response | |  | A) | Rodrigo will be unable to undergo both long-term potentiation and regular synaptic transmission. |
| orrect Answer | |  | B) | Rodrigo will be unable to undergo long-term potentiation but regular synaptic transmission will be unaffected. |
|  | |  | C) | Rodrigo’s ability to undergo both long-term potentiation and regular synaptic transmission will be unaffected. |
|  | |  | D) | Rodrigo’s regular synaptic transmission will be disrupted but his ability to undergo long-term potentiation will be unaffected. |
| [[https://avenue.cllmcmaster.ca/d2l/img/0/Shared.Main.actShow.gif?v=9.4.1000.80-4](javascript://)View Feedback](javascript://) | | | |

|  |  |  |
| --- | --- | --- |
| **Question 8** |  | 0 / 1 point |

Roger has recently suffered a mild stroke, andsustained some minor brain damage. One evening, Roger is pulled over by a police officer performing a random search. Roger’s driving skills are fine, but he fails the sobriety test when he cannot walk in a straight line. Assuming Roger has not had a drink, which of the following is the best explanation?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ncorrect Response | |  | A) | Roger’s procedural skills are intact, and he has damage to his striatum. |
|  | |  | B) | Roger’s procedural skills are compromised, and he has damage to his cortex. |
| orrect Answer | |  | C) | Roger’s procedural skills are intact and he has damage to the cerebellum. |
|  | |  | D) | Roger’s procedural skills are compromised, and he has damage to his hippocampus. |
| [[https://avenue.cllmcmaster.ca/d2l/img/0/Shared.Main.actShow.gif?v=9.4.1000.80-4](javascript://)View Feedback](javascript://) | | | |

|  |  |  |
| --- | --- | --- |
| **Question 9** |  | 1 / 1 point |

You are studying the neurological mechanisms of a newly discovered species of sea invertebrate. Although its brain is capable of normal synaptic transmission, it is not capable of engaging in long-term potentiation. Given this knowledge, which of the following would most likely **NOT**be observed in the brain of the sea invertebrate?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| orrect Response | |  | A) | Binding of glutamate to NMDA receptors. |
|  | |  | B) | Release of the neurotransmitter glutamate from the presynaptic neuron. |
|  | |  | C) | Binding of glutamate to AMPA receptors. |
|  | |  | D) | Depolarization of the cell from -70 mV to -50 mV. |
| [[https://avenue.cllmcmaster.ca/d2l/img/0/Shared.Main.actShow.gif?v=9.4.1000.80-4](javascript://)View Feedback](javascript://) | | | |

|  |  |  |
| --- | --- | --- |
| **Question 10** |  | 1 / 1 point |

Which of the following best exemplifies a deficit in **declarative memory?**

|  |  |  |  |
| --- | --- | --- | --- |
|  |  | A) | Leona remembers completing a puzzle the previous day but is unable to replicate this task today. |
| orrect Response |  | B) | Johann is unable to remember the information that he learned in his chemistry class the previous day. |
|  |  | C) | Jonie is a 27-year old woman who is unable to remember how to swim despite being an avid swimmer as a child. |
|  |  | D) | Pietro is suddenly unable to remember the normal route he takes to get home from school each day. |

|  |
| --- |
| Live Lecture Questions |

|  |  |  |
| --- | --- | --- |
| **Question 1** |  | 0 / 1 point |

Information about objects that are to the right of a fixation point fall on the \_\_\_\_\_\_\_\_\_\_\_\_\_ side of the retina and is sent through the primary visual pathway to the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ side of V1.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ncorrect Response | |  | A) | Left; Right |
| orrect Answer | |  | B) | Left; Left |
|  | |  | C) | Right; Right |
|  | |  | D) | Right; Left |
| [[https://avenue.cllmcmaster.ca/d2l/img/0/Shared.Main.actShow.gif?v=9.4.1000.80-4](javascript://)View Feedback](javascript://) | | | |

|  |  |  |
| --- | --- | --- |
| **Question 2** |  | 1 / 1 point |

Which of the following is not evidence of top-down influences on visual processing?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| orrect Response | |  | A) | Certain cells in V1 respond maximally to lines of different orientations. |
|  | |  | B) | Experience with shadows and checkerboards influences colour perception. |
|  | |  | C) | Interpreting circles with gradation as being concave or convex. |
|  | |  | D) | Incorrectly concluding that a child’s image is of an exotic dancer. |
| [[https://avenue.cllmcmaster.ca/d2l/img/0/Shared.Main.actShow.gif?v=9.4.1000.80-4](javascript://)View Feedback](javascript://) | | | |

|  |
| --- |
| Recall Web Module Questions |

|  |  |  |
| --- | --- | --- |
| **Question 3** |  | 1 / 1 point |

Which statement regarding the retinal layers is correct?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| orrect Response | |  | A) | Ganglion cells are the first retinal layer light passes through, and they directly transmit information to the optic nerve. |
|  | |  | B) | The retinal pigment epithelium provides necessary nutrients to the ganglion cells. |
|  | |  | C) | Information from one photoreceptor is expanded to multiple ganglion cells, which allows for extensive processing to be done in the retina. |
|  | |  | D) | Bipolar cells convert the original light impulse into an electrical neuronal signal. |
| [[https://avenue.cllmcmaster.ca/d2l/img/0/Shared.Main.actShow.gif?v=9.4.1000.80-4](javascript://)View Feedback](javascript://) | | | |

|  |  |  |
| --- | --- | --- |
| **Question 4** |  | 1 / 1 point |

Which of the following statements regarding the retina is correct?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | |  | A) | The fovea provides the greatest acuity due to the high density of rods in this area. |
| orrect Response | |  | B) | In dim light conditions, focusing an image on the retinal periphery will not improve colour perception. |
|  | |  | C) | Bipolar cells are important because they facilitate communication within layers of the retina. |
|  | |  | D) | Visual acuity in the periphery of the retina is poor due to smaller receptive fields in this area. |
| [[https://avenue.cllmcmaster.ca/d2l/img/0/Shared.Main.actShow.gif?v=9.4.1000.80-4](javascript://)View Feedback](javascript://) | | | |

|  |  |  |
| --- | --- | --- |
| **Question 5** |  | 1 / 1 point |

Which of the characteristics of light is correctly described?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| orrect Response | |  | A) | Light in the infrared spectrum has a lower frequency than the visible spectrum. |
|  | |  | B) | Light in the ultraviolet spectrum has wavelengths longer than 750nm. |
|  | |  | C) | The more wavelengths that combine in an image, the more saturated it will appear. |
|  | |  | D) | The shorter the amplitude of light, the more light that is being reflected. |
| [[https://avenue.cllmcmaster.ca/d2l/img/0/Shared.Main.actShow.gif?v=9.4.1000.80-4](javascript://)View Feedback](javascript://) | | | |

|  |  |  |
| --- | --- | --- |
| **Question 6** |  | 0 / 1 point |

In a dark environment, which type of vertebrate with big eyes would be most suited to survive as prey?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | |  | A) | Frontward directed eyes and low acuity. |
| ncorrect Response | |  | B) | Laterally directed eyes and high acuity. |
|  | |  | C) | Frontward directed eyes and high acuity. |
| orrect Answer | |  | D) | Laterally directed eyes and low acuity. |
| [[https://avenue.cllmcmaster.ca/d2l/img/0/Shared.Main.actShow.gif?v=9.4.1000.80-4](javascript://)View Feedback](javascript://) | | | |

|  |
| --- |
| Application Web Module Questions |

|  |  |  |
| --- | --- | --- |
| **Question 7** |  | 1 / 1 point |

Anita is examining the anatomy of the eye of a newly discovered species of fish. She notes that the eye contains all of the same features as those found in the human eye, except that it does not contain an iris and the eyes are laterally directed. Which of the following would this species most likely **NOT**be able to do?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | |  | A) | Change the focus on the image of an object depending on how close or far away it is. |
| orrect Response | |  | B) | Adapt to changes in incoming light to allow more or less light to hit the retina. |
|  | |  | C) | Detect and respond quickly to a predators approaching from a variety of different angles. |
|  | |  | D) | Detect differences in colour of approaching predators. |
| [[https://avenue.cllmcmaster.ca/d2l/img/0/Shared.Main.actShow.gif?v=9.4.1000.80-4](javascript://)View Feedback](javascript://) | | | |

|  |  |  |
| --- | --- | --- |
| **Question 8** |  | 1 / 1 point |

As part of her eye examination, Maria is treated with a solution, which paralyzes the muscles of her iris. Assuming the effects of the solution last for a day, what abnormalities might Maria most likely experience while driving home?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | |  | A) | The inability to see anything altogether. |
|  | |  | B) | The inability to focus on a traffic light in the distance. |
|  | |  | C) | The inability to focus on fine details. |
| orrect Response | |  | D) | The inability to see clearly in bright light conditions. |
| [[https://avenue.cllmcmaster.ca/d2l/img/0/Shared.Main.actShow.gif?v=9.4.1000.80-4](javascript://)View Feedback](javascript://) | | | |

|  |  |  |
| --- | --- | --- |
| **Question 9** |  | 1 / 1 point |

Tabitha is undergoing a physical examination at her doctor’s office where a light is shone into Tabitha’s eyes from various points.  Tabitha has trouble seeing the light when in her far left visual field, but she can see it everywhere else. When Tabitha can see the light, she cannot tell the doctor what colour it is. Where would you expect Tabitha to have damage?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | |  | A) | Temporal lobe and the optic nerve before the optic chiasm. |
| orrect Response | |  | B) | Ventral stream and the optic tract after the optic chiasm. |
|  | |  | C) | Parietal lobe and the optic nerve before the optic chiasm. |
|  | |  | D) | Dorsal stream and the optic tract after the optic chiasm. |
| [[https://avenue.cllmcmaster.ca/d2l/img/0/Shared.Main.actShow.gif?v=9.4.1000.80-4](javascript://)View Feedback](javascript://) | | | |

|  |  |  |
| --- | --- | --- |
| **Question 10** |  | 1 / 1 point |

Four bipolar cells are located adjacent to one another in the retina. Assume that the cells are numbered 1 to 4 from left to right. If cells 2 and 4 received intense stimulation from light, while cells 1 and 3 received only mild stimulation, what would be the most likely response when these cells are looked at in isolation?

|  |  |  |  |
| --- | --- | --- | --- |
|  |  | A) | Cell 1 would send a stronger signal to the brain than cell 3, and both cells would receive the same lateral inhibition. |
|  |  | B) | Cells 2 and 4 would send the strongest signal to the brain, and would receive the most lateral inhibition. |
| orrect Response |  | C) | Cell 4 would send a stronger signal to the brain than cell 2, and cell 3 would receive the most lateral inhibition. |
|  |  | D) | Cell 2 would send the strongest signal to the brain, and cell 3 would receive the most lateral inhibition. |

|  |
| --- |
| Live Lecture Questions |

|  |  |  |
| --- | --- | --- |
| **Question 1** |  | 0 / 1 point |

Which of the following provides a complete explanation of how the McCollough effect works at the cellular level?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| orrect Answer | |  | A) | There is no satisfactory explanation to how this effect works. |
| ncorrect Response | |  | B) | Green cones become fatigued, resulting in a pink afterimage. |
|  | |  | C) | Red-Green opponent cells at the ganglion level become fatigued, producing an afterimage. |
|  | |  | D) | White-Black opponent cells at the ganglion level become fatigued, producing an afterimage. |
| [[https://avenue.cllmcmaster.ca/d2l/img/0/Shared.Main.actShow.gif?v=9.4.1000.80-4](javascript://)View Feedback](javascript://) | | | |

|  |  |  |
| --- | --- | --- |
| **Question 2** |  | 1 / 1 point |

According to an evolutionary psychology analysis, why do humans wear artificial blush?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| orrect Response | |  | A) | Wearing blush **increases** the “redness” in the face signaling to a potential mate good blood oxygenation and **high**levels of estrogen. |
|  | |  | B) | Wearing blush **decreases** the “redness” in the face signaling to a potential mate good blood oxygenation and **low**levels of estrogen. |
|  | |  | C) | Wearing blush **decreases** the “redness” in the face signaling to a potential mate good blood oxygenation and **high**levels of estrogen. |
|  | |  | D) | Wearing blush **increases** the “redness” in the face signaling to a potential mate good blood oxygenation and **low**levels of estrogen. |
| [[https://avenue.cllmcmaster.ca/d2l/img/0/Shared.Main.actShow.gif?v=9.4.1000.80-4](javascript://)View Feedback](javascript://) | | | |

|  |
| --- |
| Recall Web Module Questions |

|  |  |  |
| --- | --- | --- |
| **Question 3** |  | 0 / 1 point |

When considering depth perception, which of the following is correct?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| orrect Answer | |  | A) | Front facing eyes experience slightly different visual scenes. |
|  | |  | B) | Accommodation is a useful monocular cue up to approximately 30 feet. |
|  | |  | C) | Relative size is equally useful when dealing with familiar and unfamiliar objects. |
| ncorrect Response | |  | D) | Infants without crawling experience do not display depth perception. |
| [[https://avenue.cllmcmaster.ca/d2l/img/0/Shared.Main.actShow.gif?v=9.4.1000.80-4](javascript://)View Feedback](javascript://) | | | |

|  |  |  |
| --- | --- | --- |
| **Question 4** |  | 1 / 1 point |

Regarding colour mixing, which of the following is true?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | |  | A) | In additive colour mixing, mixing the primary colour yellow with its complement results in grey. |
|  | |  | B) | When pigments are mixed additively, we see colours that the pigments jointly reflect. |
|  | |  | C) | In subtractive colour mixing, mixing the primary colours red and blue results in brown. |
| orrect Response | |  | D) | When pigments are combined in subtractive mixing, we see colours that are not absorbed. |
| [[https://avenue.cllmcmaster.ca/d2l/img/0/Shared.Main.actShow.gif?v=9.4.1000.80-4](javascript://)View Feedback](javascript://) | | | |

|  |  |  |
| --- | --- | --- |
| **Question 5** |  | 0 / 1 point |

Which of the following is **FALSE** regarding the perception of movement in Johansson’s study?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| orrect Answer | |  | A) | A few seconds of motion was only sometimes enough for participants to tell that the object lit was human. |
|  | |  | B) | Participants shown a motion clip for a few seconds were able to identify the action being performed. |
|  | |  | C) | When given a motion clip some participants were able to identify the gender of the lit individual. |
| ncorrect Response | |  | D) | Still images made it difficult for participants to identify that the object lit was human. |
| [[https://avenue.cllmcmaster.ca/d2l/img/0/Shared.Main.actShow.gif?v=9.4.1000.80-4](javascript://)View Feedback](javascript://) | | | |

|  |  |  |
| --- | --- | --- |
| **Question 6** |  | 1 / 1 point |

Which of the following is **NOT**one of the findings from visual cliff experiments looking at whether fear of heights is innate or learned?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| orrect Response | |  | A) | Infants who have experience crawling show less fear of the visual cliff than infants of the same age with no experience crawling. |
|  | |  | B) | Infants too young to crawl show a curiosity toward the deep side of the visual cliff rather than fear. |
|  | |  | C) | Non-human species of animals that begin walking right after birth show a fear of the deep side of the visual cliff. |
|  | |  | D) | Infants who are too young to have begun crawling show fear when exposed to the deep side of the visual cliff. |
| [[https://avenue.cllmcmaster.ca/d2l/img/0/Shared.Main.actShow.gif?v=9.4.1000.80-4](javascript://)View Feedback](javascript://) | | | |

|  |
| --- |
| Application Web Module Questions |

|  |  |  |
| --- | --- | --- |
| **Question 7** |  | 1 / 1 point |

Doctors have been following the Carlton family for several generations in an attempt to figure out the genes involved in their colour blindness. Timothy the youngest child views the world in reds, greens and shades of grey. Samantha the eldest daughter has slightly below normal visual acuity and views the world in in yellow’s, blue’s and shades of grey. Which of the following colour blindness disorders are Timothy and Samantha **MOST** likely to have?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | |  | A) | Timothy has Deuteranopia, while Samantha has Tritanopia. |
|  | |  | B) | Timothy has Dueteranopia or Protanopia, while Samantha has Tritanopia. |
|  | |  | C) | Timothy has Protanopia, while Samantha has Deuteranopia. |
| orrect Response | |  | D) | Timothy has Tritanopia, while Samantha has Deuteranopia or Protanopia. |
| [[https://avenue.cllmcmaster.ca/d2l/img/0/Shared.Main.actShow.gif?v=9.4.1000.80-4](javascript://)View Feedback](javascript://) | | | |

|  |  |  |
| --- | --- | --- |
| **Question 8** |  | 0 / 1 point |

Which of the following situations is most likely to utilize **retinal disparity**?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | |  | A) | A cheetah is stalking a group of sand-coloured gazelles as they run through the desert. |
| ncorrect Response | |  | B) | A rabbit is watching for the family of foxes that has been stalking the rabbit. |
| orrect Answer | |  | C) | An owl is hunting for a nearby brown mouse hiding on the forest soil. |
|  | |  | D) | A wolf, missing an eye from an attack, is hunting a brown squirrel hiding in a tree. |
| [[https://avenue.cllmcmaster.ca/d2l/img/0/Shared.Main.actShow.gif?v=9.4.1000.80-4](javascript://)View Feedback](javascript://) | | | |

|  |  |  |
| --- | --- | --- |
| **Question 9** |  | 1 / 1 point |

Consider a person with a mutation that restricts green cones to only transmit an excitatory signal. What effect would this have on colour perception?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | |  | A) | The colour yellow could be seen, but the colours red and green would be impaired. |
|  | |  | B) | The colours yellow and red could be seen, but the colour green would be impaired. |
| orrect Response | |  | C) | The colour red could be seen, but the colours green and yellow would be impaired. |
|  | |  | D) | The colours red, green and yellow would all be impaired. |
| [[https://avenue.cllmcmaster.ca/d2l/img/0/Shared.Main.actShow.gif?v=9.4.1000.80-4](javascript://)View Feedback](javascript://) | | | |

|  |  |  |
| --- | --- | --- |
| **Question 10** |  | 1 / 1 point |

If the receptive field of a ganglion cell responds in an opponent fashion in which it is excited if blue strikes the middle or yellow strikes the surround, which of the following would produce the weakest response?

|  |  |  |  |
| --- | --- | --- | --- |
|  |  | A) | Blue strikes both the middle and the surround. |
|  |  | B) | Yellow strikes both the middle and the surround. |
|  |  | C) | Blue strikes the middle and yellow strikes the surround. |
| orrect Response |  | D) | Yellow strikes the middle and blue strikes the surround. |

|  |
| --- |
| Live Lecture Questions |

|  |  |  |
| --- | --- | --- |
| **Question 1** |  | 1 / 1 point |

Which of the following is an explanation for the hollow face illusion discussed in Live Lecture?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | |  | A) | The illusion demonstrates a limitation of sensation because of a prior bias to expecting faces to point outward. |
|  | |  | B) | The illusion demonstrates a limitation of sensation because of a prior bias to expecting faces to point inward. |
|  | |  | C) | The illusion demonstrates a limitation of perception because of a prior bias to expecting faces to point inward. |
| orrect Response | |  | D) | The illusion demonstrates a limitation of perception because of a prior bias to expecting faces to point outward. |
| [[https://avenue.cllmcmaster.ca/d2l/img/0/Shared.Main.actShow.gif?v=9.4.1000.80-4](javascript://)View Feedback](javascript://) | | | |

|  |  |  |
| --- | --- | --- |
| **Question 2** |  | 1 / 1 point |

Which of the following correctly describes the competing theories for face processing as presented in Live Lecture?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | |  | A) | Research presented suggests that faces are processed by considering individual components rather than the whole face. |
| orrect Response | |  | B) | Research presented suggests that faces are processed by considering the whole facerather than individual components. |
|  | |  | C) | Research presented suggests that faces are processed by considering the mouth and nose rather than the eyes and eyebrows. |
|  | |  | D) | Research presented suggests that faces are processed by considering the eyes and eyebrows rather than the mouth and nose. |
| [[https://avenue.cllmcmaster.ca/d2l/img/0/Shared.Main.actShow.gif?v=9.4.1000.80-4](javascript://)View Feedback](javascript://) | | | |

|  |
| --- |
| Recall Web Module Questions |

|  |  |  |
| --- | --- | --- |
| **Question 3** |  | 0 / 1 point |

Which of the following statements about illusions is correct?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | |  | A) | The Ponzo illusion takes advantage of how we can infer depth based on the presence of right angles. |
| ncorrect Response | |  | B) | The Ames Room takes advantage of location constancy by placing individuals at different distances. |
| orrect Answer | |  | C) | Illusions reveal a misapplication of perceptual constancies. |
|  | |  | D) | Illusions are so powerful because of their ability to affect all individuals equally. |
| [[https://avenue.cllmcmaster.ca/d2l/img/0/Shared.Main.actShow.gif?v=9.4.1000.80-4](javascript://)View Feedback](javascript://) | | | |

|  |  |  |
| --- | --- | --- |
| **Question 4** |  | 0 / 1 point |

Which of the following correctly describes a Gestalt Principle?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| orrect Answer | |  | A) | The principle of similarity says that objects sharing physical properties tend to be grouped together. |
| ncorrect Response | |  | B) | The principle of continuity says that people tend to perceive shapes that have gaps in them as a single continuous shape. |
|  | |  | C) | The principle of proximity says that shapes located close together in the visual field are processed in nearby areas of the visual cortex. |
|  | |  | D) | The principle of common fate allows objects that are used for similar purposes to be grouped together. |
| [[https://avenue.cllmcmaster.ca/d2l/img/0/Shared.Main.actShow.gif?v=9.4.1000.80-4](javascript://)View Feedback](javascript://) | | | |

|  |  |  |
| --- | --- | --- |
| **Question 5** |  | 1 / 1 point |

What does topographical organization of the visual cortex refer to?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | |  | A) | Different areas of the brain correspond to different processing streams. |
| orrect Response | |  | B) | Adjacent areas of the cortex process adjacent information from a visual scene. |
|  | |  | C) | Certain parts of the brain process different characteristics of a visual scene. |
|  | |  | D) | The ability of the frontal lobe to store a neural map of a particular visual scene. |
| [[https://avenue.cllmcmaster.ca/d2l/img/0/Shared.Main.actShow.gif?v=9.4.1000.80-4](javascript://)View Feedback](javascript://) | | | |

|  |  |  |
| --- | --- | --- |
| **Question 6** |  | 1 / 1 point |

Which of the following is true regarding Biederman’s Geon theory of object recognition?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | |  | A) | There are a total of 46 different geons, or simple geometrical forms, that can be used to identify 150 million different objects. |
|  | |  | B) | Geon theory can explain why there are category-specific losses in object recognition. |
|  | |  | C) | When we are confronted with a novel stimulus, we can create new geons that can help us recognize the object. |
| orrect Response | |  | D) | We are able to recognize some objects that do not have a geon combination that fits the object’s shape. |
| [[https://avenue.cllmcmaster.ca/d2l/img/0/Shared.Main.actShow.gif?v=9.4.1000.80-4](javascript://)View Feedback](javascript://) | | | |

|  |
| --- |
| Application Web Module Questions |

|  |  |  |
| --- | --- | --- |
| **Question 7** |  | 1 / 1 point |

Jan is reading a book about horses while he and his family travel by train. Jan looks up from his book and sees a tiny horse through his window. When his brother, Mendel, looks out the window he sees that the animal is, in fact, a cow far off in the distance. Why did Jan perceive the animal to be a tiny horse?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | |  | A) | Misapplication of shape constancy; Influence of bottom-up processing. |
| orrect Response | |  | B) | Misapplication of size constancy; Influence of top-down processing. |
|  | |  | C) | Misapplication of shape constancy; Influence of top-down processing. |
|  | |  | D) | Misapplication of size constancy; Influence of bottom-up processing. |
| [[https://avenue.cllmcmaster.ca/d2l/img/0/Shared.Main.actShow.gif?v=9.4.1000.80-4](javascript://)View Feedback](javascript://) | | | |

|  |  |  |
| --- | --- | --- |
| **Question 8** |  | 1 / 1 point |

Which of the following scenarios is most likely utilizing **location constancy**?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | |  | A) | Alton notices that as he changes location, his bookshelf appears to have different dimensions but he still perceives it as being rectangular. |
| orrect Response | |  | B) | Jonah’s sister is jumping on the couch next to him, causing him to move around, but he still perceives the television to be in the same location. |
|  | |  | C) | Anila notices that her entire location is being tinted blue by the lighted sign above her, but she still perceives her friend’s shirt as being yellow. |
|  | |  | D) | Khatira notices that as she changes locations in the theatre to a seat near the back, the screen gets smaller, but she still perceives it as being the same size. |
| [[https://avenue.cllmcmaster.ca/d2l/img/0/Shared.Main.actShow.gif?v=9.4.1000.80-4](javascript://)View Feedback](javascript://) | | | |

|  |  |  |
| --- | --- | --- |
| **Question 9** |  | 0 / 1 point |

Which of the following situations is most likely utilizing the Gestalt principle of **proximity**?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | |  | A) | A white wire crossing behind and in front of other wires is likely to be grouped together as being one. |
| orrect Answer | |  | B) | A group of differently coloured flowers that is segregated from other groups of flowers is likely to be grouped together. |
| ncorrect Response | |  | C) | A group of Canadian geese flying south is likely to be grouped together as it passes by another group headed southwest. |
|  | |  | D) | A field of evenly spaced corn stalks is likely to have the row closest to the viewer grouped together. |
| [[https://avenue.cllmcmaster.ca/d2l/img/0/Shared.Main.actShow.gif?v=9.4.1000.80-4](javascript://)View Feedback](javascript://) | | | |

|  |  |  |
| --- | --- | --- |
| **Question 10** |  | 0 / 1 point |

You have inserted a microelectrode into a dog’s primary visual cortex and are recording the number of action potentials. Which pattern of response would most accurately describe the activation of a **complex cell**?

|  |  |  |  |
| --- | --- | --- | --- |
| orrect Answer |  | A) | Action potentials are most frequent when a bar of light is moved while being maintained at a consistent angle within the visual field. |
|  |  | B) | Action potentials decrease in frequency when a horizontal bar of light is shifted within the visual field to the right. |
| ncorrect Response |  | C) | Action potentials are most frequent when the orientation and location of the bar of light remain are randomly changed. |
|  |  | D) | Action potentials decrease in frequency when the inhibitory region of the bar of light is shifted to outside of the receptive field. |

|  |
| --- |
| Live Lecture Questions |

|  |  |  |
| --- | --- | --- |
| **Question 1** |  | 0 / 1 point |

Kenny is a 25 year old who comes to your office concerned that he has amusia. Based on the information presented in the live lecture, which of the following tasks and corresponding results would provide you with the most information for accurately determining if Kenny has amusia?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ncorrect Response | |  | A) | Foreign music processing task; poor performance. |
| orrect Answer | |  | B) | Mental rotation task; poor performance. |
|  | |  | C) | Categorizing songs by emotion task; excellent performance. |
|  | |  | D) | Mental rotation task; excellent performance. |
| [[https://avenue.cllmcmaster.ca/d2l/img/0/Shared.Main.actShow.gif?v=9.4.1000.80-4](javascript://)View Feedback](javascript://) | | | |

|  |  |  |
| --- | --- | --- |
| **Question 2** |  | 0 / 1 point |

You are running a study on rhythm perception and production that will compare the abilities of musicians and non-musicians on your tasks.  Which of the following would **not** be a consideration that you should keep in mind when designing your experiment?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ncorrect Response | |  | A) | Musicians will likely have a better grasp on the spatial arrangement of stimuli. |
|  | |  | B) | Musicians will be likely to outperform non-musicians on rhythm production tasks. |
| orrect Answer | |  | C) | Musicians will likely show higher IQ scores across all subtests of the IQ test. |
|  | |  | D) | Musicians will show less noise-related hearing loss than non-musicians. |
| [[https://avenue.cllmcmaster.ca/d2l/img/0/Shared.Main.actShow.gif?v=9.4.1000.80-4](javascript://)View Feedback](javascript://) | | | |

|  |
| --- |
| Recall Web Module Questions |

|  |  |  |
| --- | --- | --- |
| **Question 3** |  | 0 / 1 point |

Which of the following aspects of sound localization are correct?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | |  | A) | All neurons in the superior olivary complex respond to the interaural time differences in arrival time. |
|  | |  | B) | The sound shadow produced by the head decreases the intensity of sounds heard by the earclosest to the sound. |
| orrect Answer | |  | C) | Sounds directly in front of us are difficult to distinguish from sounds coming from directly behind. |
| ncorrect Response | |  | D) | Pinna cues alter incoming sound wave frequencies to determine the distance to a sound source. |
| [[https://avenue.cllmcmaster.ca/d2l/img/0/Shared.Main.actShow.gif?v=9.4.1000.80-4](javascript://)View Feedback](javascript://) | | | |

|  |  |  |
| --- | --- | --- |
| **Question 4** |  | 1 / 1 point |

Which of the following is **CORRECT** regarding the range of sound frequencies that different species can detect?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | |  | A) | Humans can detect the widest range of sound frequencies due to the length of their basilar membrane. |
|  | |  | B) | Birds and bats are able to perceive a similar range of sound frequencies. |
|  | |  | C) | Fish have the smallest range of sound frequencies that they are able to detect. |
| orrect Response | |  | D) | Dogs and bats can both detect sounds of very high frequencies. |
| [[https://avenue.cllmcmaster.ca/d2l/img/0/Shared.Main.actShow.gif?v=9.4.1000.80-4](javascript://)View Feedback](javascript://) | | | |

|  |  |  |
| --- | --- | --- |
| **Question 5** |  | 1 / 1 point |

According to what you know about the localization of sound as presented in the web modules, which of the following statements is correct.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| orrect Response | |  | A) | Turing your head may help to localize sound directly behind you. |
|  | |  | B) | Interaural time difference is useful for localizing sound at a far distance. |
|  | |  | C) | Pinna cues help to localize sound and are the same in all humans. |
|  | |  | D) | Sound is localized easiest when the source is directly in front of you. |
| [[https://avenue.cllmcmaster.ca/d2l/img/0/Shared.Main.actShow.gif?v=9.4.1000.80-4](javascript://)View Feedback](javascript://) | | | |

|  |  |  |
| --- | --- | --- |
| **Question 6** |  | 1 / 1 point |

Which of the following correctly describes a component of the ear?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | |  | A) | Vibrations in the round window displace fluid in the cochlea, causing the oval window to vibrate. |
|  | |  | B) | The eardrum vibrates at amplitudes that match those of the incoming sound waves. |
| orrect Response | |  | C) | The ossicles amplify the changes in air pressure and transfer the signal to the oval window. |
|  | |  | D) | When fluids inside the cochlea force the basilar membrane to move upwards, the round window bulges outward. |
| [[https://avenue.cllmcmaster.ca/d2l/img/0/Shared.Main.actShow.gif?v=9.4.1000.80-4](javascript://)View Feedback](javascript://) | | | |

|  |
| --- |
| Application Web Module Questions |

|  |  |  |
| --- | --- | --- |
| **Question 7** |  | 1 / 1 point |

An alien species produces offspring whose basilar membranes differ in length and shape. Which of the following offspring would be able to discriminate between the greatest number of frequencies?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| orrect Response | |  | A) | Offspring with 20 mm basilar membrane that narrowed from the round window. |
|  | |  | B) | Offspring with 10 mm basilar membrane that narrowed from the round window. |
|  | |  | C) | Offspring with 15 mm basilar membrane that narrowed from the oval window. |
|  | |  | D) | Offspring with 5 mm basilar membrane that narrowed from the oval window. |
| [[https://avenue.cllmcmaster.ca/d2l/img/0/Shared.Main.actShow.gif?v=9.4.1000.80-4](javascript://)View Feedback](javascript://) | | | |

|  |  |  |
| --- | --- | --- |
| **Question 8** |  | 0 / 1 point |

Which of the following manipulations would NOT inhibit the amplification of sounds waves in the auditory pathway?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | |  | A) | Fluid in the cochlea that is thicker and resistant to movement. |
|  | |  | B) | Ear canals that grow wider as they approach the eardrum. |
| ncorrect Response | |  | C) | Inner hair cells with fewer afferents running along the cochlear nerve. |
| orrect Answer | |  | D) | A basilar membrane that is more flexible than normal. |
| [[https://avenue.cllmcmaster.ca/d2l/img/0/Shared.Main.actShow.gif?v=9.4.1000.80-4](javascript://)View Feedback](javascript://) | | | |

|  |  |  |
| --- | --- | --- |
| **Question 9** |  | 1 / 1 point |

Which of the following scenarios correctly describes the outcome on altering bird song production?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ncorrect Response | |  | A) | A male with smaller HVC will be less skilled at singing than a male with large HVC. |
|  | |  | B) | A female with a larger RA region will produce less songs than a female with a smaller RA region. |
| orrect Answer | |  | C) | Lowering the testosterone available in the brain of the male will inhibithis bird song production. |
|  | |  | D) | A lesion to the HVC in female will inhibit her bird song production to a lower level than previously. |
| [[https://avenue.cllmcmaster.ca/d2l/img/0/Shared.Main.actShow.gif?v=9.4.1000.80-4](javascript://)View Feedback](javascript://) | | | |

|  |  |  |
| --- | --- | --- |
| **Question 10** |  | 0 / 1 point |

Gina is a talented musician who has been playing the viola for 10 years. Enrique never learned to play a musical instrument but has recently been taking some music classes to help him with discriminating the pitch of sounds. Which of the following is mostly likely **TRUE**?

|  |  |  |  |
| --- | --- | --- | --- |
|  |  | A) | Gina will respond much differently to tones produced by a piano or a guitar than Enrique. |
| ncorrect Response |  | B) | Gina will likely have many more neural connections within her auditory cortex than Enrique. |
|  |  | C) | Gina will have a larger planumtemporale and Heschl’s gyrus, while Enrique will have a larger Broca’s area. |
| orrect Answer |  | D) | Gina will likely have a larger portion of her cortex dedicated to processing sounds from string instruments than Enrique. |

GOOD LUCK ☺