**ATTENTION STUDENT**: If you are found to have plagiarized any part of your PsychSim assignment, you will receive a 0 for the assignment and may be formally reported to KPU. If you wish to quote the source provided or any other webpage, you MUST cite the source using APA formatting. To avoid plagiarism, write all answers **in your own words**.

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**PsychSim Online: Maze Learning (Latent Learning)**

**Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Student ID: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Course/Section: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Instructor: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

Read this article to answer the following questions. Note: you do not need to understand the neuroanatomy section in detail to answer the questions.

To access the article, you will be required to log in with your KPU login information.

<https://doi-org.ezproxy.kpu.ca:2443/10.1016/j.cobeha.2020.06.003>

**Matching**

Match the key terms from the article to their definitions.

\_\_\_ Cognitive map A. Intrinsic motivation to seek information that lacks explicit   
 benefit

\_\_\_ Curiosity B. Learning that occurs without reinforcement or punishment

\_\_\_ Latent learning C. Mental representation of the elements within an area

**True or False**

For each of the following questions, indicate whether they are true or false. If they are false, rewrite the statement below it to make it correct.

1. Classic learning theories suggest that all learning requires a reward.
2. Latent learning requires a reward and exploration always appears purposeful.
3. Cognitive maps require a high level of detail to properly represent the world.
4. Artificial Intelligence (AI) primarily uses latent learning, whereas animals or humans have the curiosity to use reinforcement learning (RL).
5. Researchers have discovered all of the areas of the brain that drive curiosity.
6. What are the three criteria Wang and Hayden identified to define curiosity?
7. Explain the counterfactual curiosity task **in your own words**, and briefly discuss its significance with regards to curiosity.
8. The two brain areas identified by the article as potential areas that drive curiosity choice are (highlight or underline both):
9. Dorsal anterior cingulate cortex
10. Inferior temporal gyrus
11. Orbitofrontal cortex
12. Periamygdaloid cortex
13. Piriform cortex
14. Posterior parietal cortex

Complete the following activity (feel free to play around with it and change the difficulty). <https://www.mathsisfun.com/games/maze-3d.html> (activity)

1. Did you feel that you were memorizing a sequence of turns or that you were forming a cognitive map of the maze?
2. Imagine you were put into a maze and you were given the option to explore it. Do you think you would do better on the maze if you are given a map the first time (like in the activity), or if you had the chance to explore the maze yourself before being asked to find the exit? Which do you think would be more intrinsically rewarding to you personally? Why?