STUDENT WORKSHEET
ACTIVITY 5D BRAIN MAP WORKSHEET

Name____________________________

1. You are taking a trip from Dallas to Corpus Christi. You must stop in Waco for gas and Austin to make a phone call. Use either the tree diagram of the basic counting principle to determine how many paths are possible for you to take using map A and map B. Show your work.

Map A

This is a Texas map overlaying a picture of the human brain. Show two possible paths from Dallas to Waco, three possible paths from Waco to Austin, and one possible path from Austin to Corpus Christi. See example of Texas map overlaying brain.
This is another Texas map overlaying a picture of the human brain. Show 3 possible paths from Dallas to Waco, 3 possible paths from Waco to Austin, and 4 possible paths from Austin to Corpus Christi.

2. Refer to lesson 2 on brain anatomy to determine the following: Compare the cities and roads on the map to parts of the brain.
   A. What part of the brain do the cities represent? ________________________
   B. What part of the brain do the roads represent? ________________________

3. Which map represents the brain of an active elderly person? An inactive elderly person? Explain your answers
   Map _____ represents the brain of an active elderly person because__________________
   Map _____ represents the brain of an inactive elderly person because__________________

4. List mental activities you do now:
   ______________________________________________________________________
   ______________________________________________________________________
   ______________________________________________________________________
List ways that you could increase your mental activity?

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5. List physical activities you do now.

___________________________________________________________________________

How could you increase your physical activity?

___________________________________________________________________________

Can you think of reasons why your physical activities may have to be modified as you age?

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6. If going from Dallas to Corpus Christi represents neuron pathways in problem solving, how would an elderly person with brain map A solve a problem differently than an elderly person with brain map B? Give an example using a problem-solving task.

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7. Waco is blocked due to flooding and Austin is blocked due to road repair. Give an example of an event that could occur in someone’s life that could cause a blocked neural pathway similar to a road block on a route to get to a destination.

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8. A commercial states the following:

You have 100 billion brain cells. What are you going to do? Sit around all day and do nothing. Stay in school.

Based on what you have learned from this lesson, why does this commercial make sense for you as a teenager?

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