Name KEY Adolescent Brain

Exercise: Answer the following focus questions using the online article "Interview with Dr. Giedd." Class discussion will follow.

- Dr. Giedd, a neuroscientist, researches adolescent brain development at what institute? <u>His research is conducted at the National Institute of Mental Health</u> (in the caption).
- According to Dr. Giedd, what is the most surprising result of recent brain studies? The surprising thing is how much teen brain is rapidly changing (paragraph 1)
- 3. By age <u>6</u> (paragraph 1) the brain is 95% of its adult size.
- 4. The grey matter, the thinking part of the brain, continues to thicken as

_____neural connections grow (paragraph 1)_____

5. The "pruning down phase" is based on what principle?

_____"Use it or Lose it"__(paragraph 3)______

6. What happens to the cells and connections that are not made?

_____When connections are not made, the cells wither and die.___ paragraph 3____

- 7. The part of the brain that sits behind your forehead is called the _____The prefrontal cortex (or frontal lobe) sits behind the forehead.____(paragraph 5)____
- 8. What is the function of the prefrontal cortex?
 _____The prefrontal cortex (or frontal lobe) is responsible for organizing,

planning, strategies, responsible decisions, thinking ahead, warns of potential

consequences, and managing impulses.__(paragraph 5)____

- 9. Choose the answer that completes this sentence: In the adolescent stage, the prefrontal cortex is: (fully developed, *not* fully developed). Paragraph 6
- 10. List a few ways adolescents can gain skills in these functions to minimize negative consequences of an under-developed prefrontal cortex.

Take courses on study strategies, write notes during teacher explanations, repeat the number of times for viewing material, allow time for thinking and processing before acting

11. What does Dr. Giedd consider "cruel irony?"

_____The cruel irony is that the teen brain is at a vulnerable time and that's when children are most likely to experiment with drugs and alcohol_____(Paragraph 7)

Conclusion: Whatever we give our attention shapes the neural connections of our brains. Through practice and effort we can strengthen the neural connections for more effective learning.