



Name: _____

Tobacco Addiction

Website: <http://teens.drugabuse.gov/educators/nida-teaching-guides/mind-over-matter/tobacco-addiction>

Directions: Use the website above or printed NIDA Tobacco Addiction Guide to answer the following questions. For some of the questions, you may need to consult or reference an additional resource.

1. Identify the ways nicotine can enter the bloodstream and brain.

2. Describe two effects nicotine has on the body.

3. *Extend:* Why/how does *nicotiana tabacum* (tobacco) use the chemical nicotine?

4. Write a short explanation or draw a picture that shows how neurotransmitters help nerve cells (neurons) communicate. Be sure to include/depict the “lock and key” idea.

5. Which neurotransmitter does nicotine mimic?

6. Research two specific effects acetylcholine has on the body. Hypothesize why it may be harmful for nicotine to mimic the impact of this neurotransmitter without the actual physiological stimulus.

7. Which other neurotransmitter is impacted by nicotine? What affect does the release of this neurotransmitter have?

8. Explain in your own words the meaning of the word tolerance and how it applies to drug use and addiction.

9. How successful are nicotine users when trying to quit or get over their addiction?