

Name \_\_\_\_\_

## Nicotine's Sneaky Impact: How it Affects the Developing Brains of Adolescents

### Open-Ended Response Answer Key

1. Nicotine can alter the reward system in the brain by making it more responsive to nicotine and less responsive to natural rewards like food or social interactions. This can lead to nicotine dependence, where individuals become highly motivated to seek and use nicotine while losing interest in healthy activities. Over time, this cycle can reinforce nicotine use and addiction, making it challenging to quit.
2. Nicotine use during adolescence can impact emotional and mental health by increasing the risk of mood disorders, such as depression and anxiety. While nicotine may initially provide temporary relief from stress or anxiety, it can worsen these conditions over time. Nicotine dependence can also lead to mood swings and cravings, further affecting emotional well-being.
3. Schools and parents play a crucial role in educating teenagers about the risks of nicotine and preventing its use during adolescence. Schools can incorporate comprehensive health education programs that include information on the effects of nicotine. Parents can have open and honest conversations with their children about the dangers of nicotine, provide support, and be positive role models by not using tobacco products.
4. In an awareness campaign targeting teenagers about the effects of nicotine on the developing brain, messages should focus on the long-term consequences of nicotine use, the impact on learning and mental health, and the potential for addiction. Approaches should include relatable stories, peer testimonials, engaging visuals, and interactive activities to convey the information effectively and encourage healthy choices. The campaign should also emphasize the importance of seeking support and making informed decisions about nicotine use.

