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OMB #: 0925-0542  
Expiration Date: 4-30-08

**Form E**  
***Brain Power!***  
***The NIDA Junior Scientists Program***  
**Grades 4–5**  
**Student Knowledge Questionnaire**

Your Secret Number: \_\_\_\_\_

**Directions: Please circle the best answer.**

*Lesson 1*

1. Which drug is *always* illegal?
  - a. Caffeine
  - b. Cocaine
  - c. Alcohol
  - d. Medication for headaches
  
2. Which drug is legal *only* for adults?
  - a. Medication for headaches
  - b. Cigarettes
  - c. Caffeine
  - d. Medication for colds

*Lesson 2*

3. This part of the brain:
  - Is in the back of the head
  - Controls posture, movement, and balance
  - Is used when you play basketball or pick up your backpack

Which part is it?

- a. Cerebellum
- b. Brain stem
- c. Limbic system
- d. Cerebral cortex

4. This part of the brain:

- Has two parts (pons and medulla)
- Controls bodily activities that happen automatically, like sleeping, waking, and dreaming
- Is at the top of the spinal cord, near the bottom of the brain

Which part is it?

- a. Cerebellum
- b. Brain stem
- c. Limbic system
- d. Cerebral cortex

5. This part of the brain

- Is divided into a left and a right hemisphere
- Is the largest part of the brain
- Is responsible for artistic expression, thinking, and understanding

Which part is it?

- a. Cerebellum
- b. Brain stem
- c. Limbic system
- d. Cerebral cortex

6. This tool for studying the brain:

- Takes pictures of a living person's brain
- Can show which parts of the brain are more active or working
- Is very expensive

Which tool is it?

- a. PET scan
- b. SPECT scan
- c. MRI
- d. CAT scan

7. This tool for studying the brain:

- Uses magnets and radio waves to create pictures
- Shows the structure of the entire brain, not just the parts that are working
- Can be uncomfortable for the patient who must lie still in a small space for a long time

Which tool is it?

- a. PET scan
- b. SPECT scan
- c. MRI
- d. CAT scan

### Lesson 3

8. What is a *synapse*?

- a. A chemical that carries messages from one neuron to another
- b. The space between two neurons
- c. The name for the smallest part of the brain
- d. An electrical impulse that travels down the axon

9. What is the job of a *neurotransmitter*?

- a. Carrying messages across the synapse
- b. Making new neurons
- c. Protecting the brain
- d. Changing information into electrical signals

10. Which statement about neurotransmission is *false*?

- a. Neurotransmission is the passing of information from one neuron to another.
- b. Drugs can disrupt neurotransmission by blocking receptors.
- c. Drugs can disrupt neurotransmission by stopping neurotransmitters from being broken down properly.
- d. During neurotransmission, one neurotransmitter performs many different functions.

### Lesson 4

11. Which drug is a *stimulant*?

- a. Marijuana
- b. Alcohol
- c. Inhalants
- d. Nicotine

12. This stimulant

- Is powerful, addictive, and always illegal
- Also comes in a form called “crack”
- Can cause the heart to beat faster or even stop working at all

Which stimulant is it?

- a. Ritalin
- b. Caffeine
- c. Cocaine
- d. Nicotine

13. This stimulant

- Is a prescription drug that can help a person concentrate on his/her schoolwork
- Helps people with ADHD (attention deficit hyperactivity disorder)
- Can be very dangerous when taken by people who do not need it

Which stimulant is it?

- a. Ritalin
- b. Caffeine
- c. Cocaine
- d. Amphetamines

#### *Lesson 5*

14. Which drug travels through the blood to every organ in the body?

- a. Inhalants
- b. Marijuana
- c. Alcohol
- d. Nicotine

15. This drug

- Usually has a strong odor
- Prevents oxygen from reaching the brain
- Can cause a heart attack or suffocation

Which drug is it?

- a. Caffeine
- b. Alcohol
- c. Cocaine
- d. Inhalants

16. This drug

- Can be smoked or eaten from foods it has been cooked into
- Contains a chemical called THC that causes someone to feel slow and disoriented
- Can increase heart rate and even cause cancer of the lungs, throat, and mouth

Which drug is it?

- a. Marijuana
- b. Alcohol
- c. Ritalin
- d. Inhalants

*Lesson 6*

17. What is *addiction*?

- a. A disease that changes the way the brain works
- b. Drugs that make people sleepy
- c. A disease that attacks a person's lungs
- d. A type of equipment that scientists use

18. What is it called when an addicted person has an intense craving for a drug when he/she doesn't have it?

- a. Compulsive use
- b. Withdrawal
- c. Tolerance
- d. Reliance