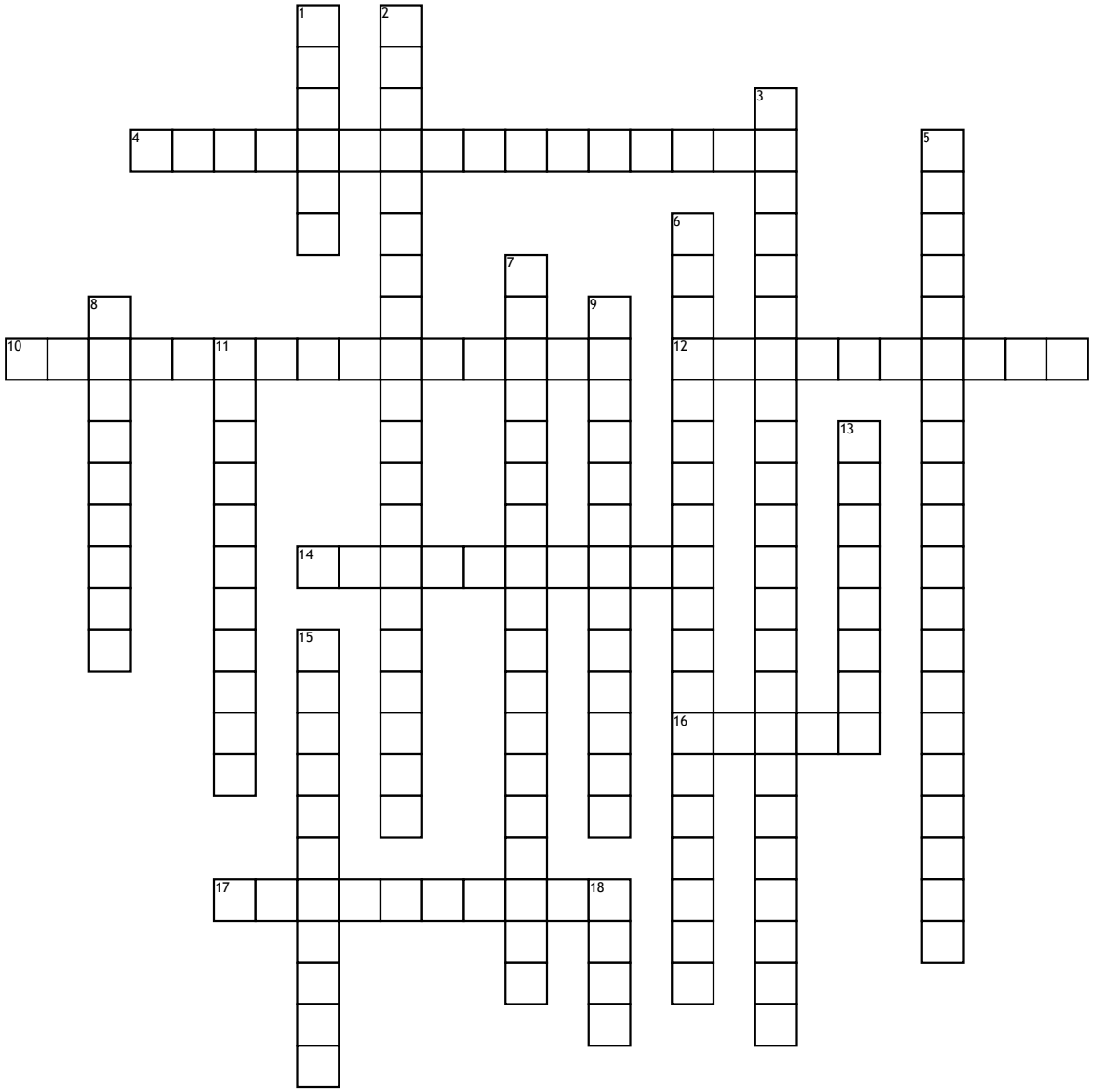
Name: _____ Date: _____

Drugs of Abuse



Across

4. Area of the brain reward pathway that neurons of other areas of the brain feed into

10. pre-existing interindividual variations in sensitivity to the drug

12. enduring, progressively evolving adaptive process in the brain reward pathways upon repeated exposure to the drug; the baseline to which the brain returns upon discontinuation of the drug use can change even after acute withdrawal has subsided

14. Type of heroin that is easily soluble and more likely to be injected

16. temporary use of drug after a period of abstinence (one time use up to even several days of use for some)

17. Individuals with a substance use disorder are never recovered, always _____

Down

1. one factor that can induce relapse to drug-taking behavior

2. a problematic pattern of use leading to significant impairment or distress

3. continued craving for a drug and tendency to return to out-of-control use even after acute withdrawal symptoms have subsided

5. are in the brain reward system where nicotinic ACh receptors are located

6. drug use results in compensatory changes in behavior that are due to accommodation to drug effects through learning acquired while the person is intoxicated

7. Ability of the synapse to change in strength and function when the pathway is over or underused (normally due to drugs)

8. Drug withdrawal and craving is associated with _____ levels of cAMP

9. shift in the dose response curve to the left, so that repeated administrations of a drug result in a greater effect of a given dose and a lower dose is required to achieve the same effect

11. When genes are stressed by drugs or a person's environment, there can be changes to how they are expressed – a gene can be turned on, turned off, or modified by several processes including DNA methylation, histone modification, etc

13. opioid antagonist used for overdose

15. Partial nicotinic agonists used for aid in smoking cessation

18. Inhibition of _____ through mu opioid receptor binding in the VTA leads to increased dopaminergic transmission