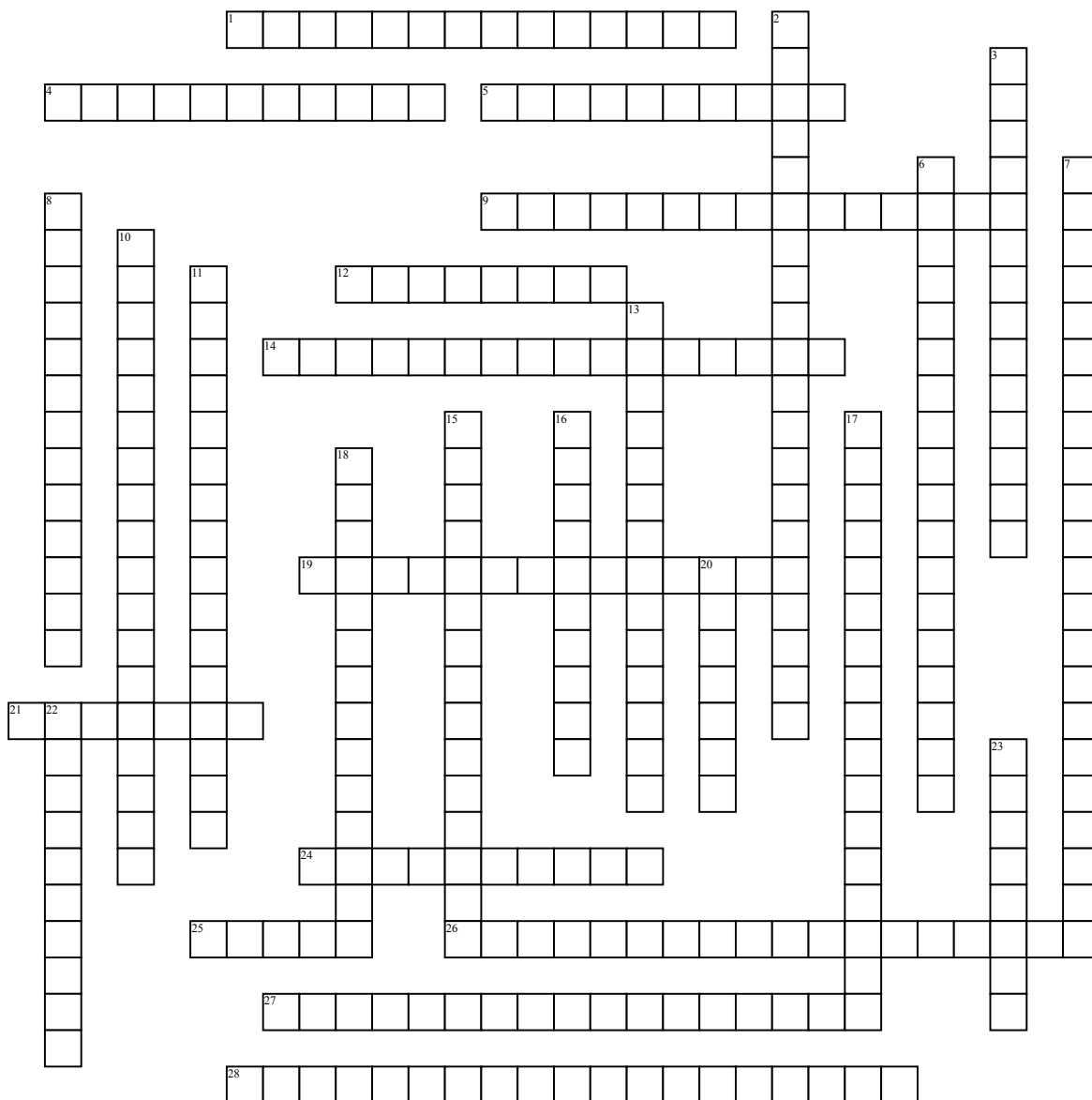# Chapter 2 Vocabulary

Across

1. lists each statement on the left and the reasoning on the right.
4. An if-then statement
5. Either true or false
9. If the hypothesis of a condition is true, then the conclusion is true.
12. The opposite of the statement
14. If a = b then a + c = b + c
19. Allows you to state a conclusion from two true conditional statements when the conclusion of one statement is the hypothesis of the other statement.
21. A conjecture that is proven
24. A conclusion reached by using inductive reasoning.
25. A convincing argument that uses deductive reasoning
26. If a = b and b = c then a = c

27. a = a
28. If a = b then a - c = b - c

Down

2. Statements with the same truth value
3. An example showing that a statement is false
6. the process of reasoning logically from given statements or facts to a conclusion.
7. If a = b then a x c = b x c
8. The combination of a conditional statement and its converse. Contains the words if and only if.
10. Reasoning based on patterns you observe
11. If a = b and c ≠ then a/c = b/c
13. The condition if not q then not p. Has the same truth value as a conditional.

15. If the hypothesis of a conditional is true, then the conclusion is true.
16. The then part of a conditional statement
17. If a = b then b= a
18. Written as sentences in a paragraph.
20. If not p then not q.
22. The if part of a conditional statement
23. The statement obtained by reversing the hypothesis and conclusion of a converse.