Instructions: Complete the crossword puzzle. Use the clues to help identify the words.

Across
3. A statement that contains the phrase if and only if.
7. A process that uses facts, definitions, accepted properties, and the laws of logic to form a logical argument.
10. A logical argument that shows a statement is true.
12. The truth or falsity of a statement.
14. The form of a conditional statement that uses the words if and then.
17. The statement formed by exchanging the hypothesis and conclusion of a conditional statement.
18. In a conditional statement, the portion following the word if.
19. An unproven statement that is based on observations.

Down
1. A type of logical statement that has two parts, a hypothesis and a conclusion.
2. Two statements that are both true or both false.
4. A process that includes looking for patterns and making conjectures.
5. The statement formed by negating the hypothesis and conclusion of a conditional statement.
6. Two lines that intersect to form a right angle.
8. The equivalent statement formed by negating the hypothesis and conclusion of the converse of a conditional statement.
9. The opposite of a statement.
11. A specific case that shows a conjecture is false.
12. A true statement that follows as a result of other true statements.
13. A type of proof written as numbered statements and corresponding reasons that show an argument in a logical order.
15. A table that lists all possible combinations of truth values for a statement and its components.
16. The part of a conditional statement following the word then.