

## ACROSS

- 2 The mood of statements in a categorical syllogism with the format, "All A are B".
- 5 Two "if, then" statements linked so that the consequent of one statement is also the antecedent of the other statement.
- 7 Has two forms, deductive and inductive.8 In "if, then" reasoning, the second premise
- 8 In "if, then" reasoning, the second premise asserts that the "if" part is true.
- 10 Transformations of the premises in a syllogism into nonequivalent forms (e.g., converting "All A are B" into "All B are A").
- 11 Term coined to label the joint influences of probability and logic on the way we think.
- 13 In a categorical syllogism a term is distributed when it is modified by "all," "no," or "not."
- 15 A type of syllogistic reasoning in which the quantifiers "some," "all," "no," and "none" are used to indicate category membership.
- 16 Bias Also known as Confirmation bias. The interference of one's personal beliefs with the ability to reason logically.
- 22 The use of systematic and orderly steps when making combinations so that all possible combinations are formed.
- 24 A conclusion is valid if it must be true if the premises are true. It "follows from" the premises.
- 25 Illicit conversions, in "if, then" statements, occur when people believe that "If A, then B" also means "If B, then A".
- 26 The mood of statements in a categorical
- syllogism with the format, "Some A are B".
  A branch of philosophy that explicitly states the rules for deriving valid conclusions.
- 29 Use of stated premises to formulate conclusions that can logically be inferred from them

- 32 People are rational, within limits. People do not behave like logic machines, but use thinking shortcuts to save time.
- **34** Two or more premises that are used to derive a valid conclusion or conclusions.
- 36 Anything that is practical. In this context, the consideration of context and purpose when engaging in real world reasoning tasks.
- **40** Diagrams in which the critical information is represented along the branches of a "tree."
- 41 In "if, then" statements, it is the information given in the "then" clause.
- 43 A spatial strategy for determining the validity of a conclusion in a categorical syllogism. Circles are used to represent category membership.
- 44 Informal rules that people use when reasoning with "if, then" statements that pragmatically create an obligation.
- 45 A task that is often used to demonstrate confirmation biases. Subjects are required to indicate which of four cards they need to turn over in order to verify a rule about the contents of each side of the card.
- **46** In "if, then" reasoning, the second premise asserts that the "then" part is true.
- 47 The mood of statements in a categorical syllogism with the format, "Some A are not B".
- **48** An inferential belief that is derived from other statements.

## DOWN

- 1 Also known as linear syllogism. Reasoning that involves the inference of orderly relationships along a single dimension (e.g., size, position) among terms.
- 3 Observations are collected that suggest or lead to the formulation of a conclusion or hypothesis.
- 4 Terms like "all," "some," "none," and "no" that are used in syllogisms to indicate category membership.
- 6 The mood of statements in a categorical syllogism with the format, "No A are not B".
- 9 In everyday reasoning, we alter the statements we are given according to our personal beliefs and then decide if a conclusion follows from the altered statements.
- 12 In "if, then" reasoning, the second premise asserts that the "then" part is false.
- 14 Concerns the real world validity or applications of a concept outside of the laboratory.
- 17 Used to classify the premises and conclusions of a categorical syllogism.
- 18 The denial of a negative statement.
- 19 Relationships that are expressed with "if, then" statements. The consequent is contingent or dependent on the antecedent.
- 20 In "if, then" statements, it is the information given in the "if" clause appealing to your reason.
- 21 A form of reasoning that involves deciding whether a conclusion can be properly inferred from two or more statements that contain quantifiers.
- 23 Informal rules that people use when reasoning with "if, then" statements that pragmatically give permission.
- 27 Statements of a contingency relationship such that if the antecedent is true, then the consequent must be true.
- 30 Statements that allow the inference of logical conclusions.
- 31 Adjectives that are neutral in that they don't connote a particular direction when they appear in a question (e.g., big, smart, tall). When asked "How big is he?", the response could be a larger or a small number.
- 33 In "if, then" reasoning, the second premise asserts that the "if" part is false.
- 35 In a categorical syllogism it is the term that is omitted from the conclusion and is mentioned in both premises.
- 37 Adjectives that connote bias when they appear in a question (e.g., poor, dumb, or small). When asked "How poor is he," it is presumed that the response will be toward the poor extreme and not towards the rich extreme.
- **38** The informal rules that people use to determine validity.
- 39 Also known as propositional logic. Logical statements that are expressed in an "if, then" format
- 42 Conclusions in deductive reasoning tasks that are not in accord with the rules of logic.