This study examines how the relationships between pairs of words can be used as a predictor of performance on a cued recall task. 100 participants recruited from Amazon’s Mechanical Turk were shown 63 word pairs of varying associative, semantic, and thematic relatedness. The pairs were divided into three blocks containing 21 word pairs each. Participants were randomly selected to rate each word pair on its level of associative, semantic, or thematic relatedness. All 63 word pairs received judgments on all three criteria. After completing the three judgement blocks, participants then took a two-minute distractor task to account for recencey effects. Following the distractor task, participants then completed a cued recall task in which they were presented with the first word from each of the 63 word pairs that they had previously judged. Participants were asked to complete each pair by filling in the correct missing word. Our findings suggest that associative relatedness, semantic relatedness, and how related participants rate word pairs play an important role in predicting recall performance.