



Abstract Reasoning Test  
STANDARD REPORT

## Abstract Reasoning Overview

The Abstract Reasoning Test (ART) is designed to assess reasoning ability in its 'purest' and most abstract form. It has been specifically developed to discriminate between candidates of above average ability, whose aptitude is being assessed for professional, senior managerial and graduate level employment. Matrix reasoning tests, in the format of the ART, are generally considered to provide the best method for assessing a person's fluid intelligence; or 'innate' mental ability. By assessing reasoning ability without reference to prior knowledge or experience such tests are designed to provide a measure of a person's 'potential', independently of that person's educational experience and achievement to date. Moreover, by not providing respondents with any contextual clues that might help them anticipate the logic underpinning the items, matrix reasoning tests are considered to assess 'mental flexibility'; namely the ability to apply 'pure logic' adaptively to understand novel situations and analyse new problems.

The ART assesses holistic deductive reasoning; namely, the ability to understand the logical rules that govern patterns which change simultaneously across more than one dimension. As such, the particular aspect of reasoning ability that the ART assesses is central to strategic thinking, to the ability to grasp the 'big picture' and understand complex 'real world' (i.e. multi-dimensional) problems. The ART is therefore particularly relevant for assessing candidates for roles which require the incumbent to think strategically, understand novel situations they have not encountered before and take logical decisions based on a sound understanding of complex, multi-dimensional patterns and relationships.

Tests of general mental ability, such as the ART, have consistently been found to be the best single predictor of job performance and trainability. Combining reasoning test scores with the results from personality tests can further improve the prediction of job performance, as can the use of job sample tests, assessment centre exercises and structured interviews. In roles where interpersonal skills (e.g. persuasiveness, diplomacy, etc.) or individual competencies (emotional intelligence, the ability to cope with stress, etc.) are important to successful performance, it may be particularly appropriate to combine information obtained from reasoning tests with the results of a personality test. In roles where experience and acquired knowledge are central to effective performance, it may be particularly appropriate to combine information obtained from reasoning tests with information obtained from assessment centre type exercises, etc.

## Abstract Reasoning Results

Sam Sample's score on the Abstract Reasoning Test indicates that, with respect to the chosen reference group, he has an 'average' level of fluid or 'natural' (i.e. untutored) reasoning ability. This score demonstrates that he is likely to be as able as most graduate calibre staff to correctly identify complex patterns in novel material that he has not encountered before, without the need to use contextual cues to aid his understanding and comprehension. His scores also indicates that he is likely to have as strong an ability as most graduate level staff to be able to understand the logic of that underpins patterns that change independently across two dimensions, and deduce the consequences of these patterns without reference to previous knowledge and experience.

As a result Sam Sample would be expected to have as much 'mental flexibility' as most staff of broadly graduate level ability. Moreover, having demonstrated an average ability (with respect to the chosen reference group) to logically analyse and understand novel problems, he should be as able as most graduate calibre staff to perceive the significance of complex new situations and correctly extrapolate the likely (future) consequences of the patterns and relationships he has identified in these situations. While he would be expected to have a reasonable ability to think strategically, it may however take him somewhat longer than it would take the highest calibre staff to fully appreciate the finer points of complex strategy.

His ability to use 'pure' (abstract) logic to understand novel situations and problems is likely to be as high as that of most staff of broadly graduate ability. As a result, while he should be able to understand fairly abstract concepts without undue difficulty, he may nonetheless be expected to experience a little difficulty fully comprehending the subtleties of the most abstract or difficult concepts. While he should be capable of learning quite complex, relatively intellectually demanding material, it is likely to take him a little longer to do so than it would take the very highest calibre staff. Moreover, he might be expected to have a little difficulty fully appreciating the subtleties of the most abstract concepts, and the most complex logic. While he should be quite capable of benefiting from high level training and instruction, it may take him a little longer than some to fully understand particularly difficult material.

Scale	Raw	Att.	1	2	3	4	5	6	7	8	9	%ile
Abstract	19	28					<input checked="" type="checkbox"/>					42

### Norm Used:

Abstract Reasoning = 121 Respondents