

# Sam Sample 27 Mar 2019



ART





## REPORT STRUCTURE

The Abstract Reasoning Standard Report presents Sam Sample's results in the following sections:

#### 1. Guide to Using This Report

- Introduction
- The Abstract Reasoning Standard Report
- Supplementary Reports
- Reference Group (Norms) Used
- Understanding the Charts and Tables

#### 2. Abstract Reasoning

- Result Description
- Results Chart

#### **DISCLAIMER**

This is a strictly confidential assessment report on Sam Sample which is to be used under the guidance of a trained professional. The information contained in this report should only be disclosed on a 'need to know basis' with the prior understanding of Sam Sample.

The results must be interpreted in the light of corroborating evidence gained from feedback and in the context of the role in question taking into account available data such as performance appraisals, actual experience, personality preferences, motivation, interests, values and skills. As such the authors and distributors cannot accept responsibility for decisions made based on the information contained in this report and cannot be held directly or indirectly liable for the consequences of those decisions.





## GUIDE TO USING THIS REPORT

#### INTRODUCTION

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.

Abstract Reasoning 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 Abstract Reasoning Test 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.

The additional diagnostic (raw) scores, which are provided after the profile chart for the Abstract Reasoning Test, enable assessors to establish the respondent's test taking style. These provide additional information which allows assessors to determine the trade-off the candidate has made between speed (Percentage Items Attempted) and accuracy when responding to the test items. Assessors should be mindful of the need to interpret these raw scores in the context of the candidate's scaled (stanine or percentile) score on each subtest, as **both** accuracy and speed will increase for higher scorers.

## The Abstract Reasoning Standard Report

The abstract reasoning standard report provides a detailed breakdown of the respondent's performance in the Abstract Reasoning Test using narratives and profile charts.





#### SUPPLEMENTARY REPORTS

The information gained from this report can be used in conjunction with other supplementary reports. The supplementary reports available for the Abstract Reasoning Test are:

#### **Results Spreadsheet**

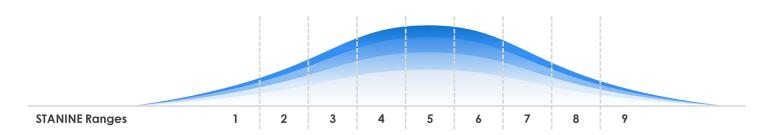
The results spreadsheet provides a summary of the respondents' results in the form of a spread sheet.

#### **Respondent Feedback Report**

The feedback report is intended for sharing directly with respondents for their personal insight. It provides a breakdown of the respondent's performance using simplified narratives.

### REFERENCE GROUP (NORMS) USED

A reference group is used to evaluate Sam's results. His results are presented as standardised STANINE scores with Mean=5 and SD=2 as demonstrated in the following chart.



The following norm was used to generate this report:

Test		Norm Used	Sample Size		
Abstract Reasoning (Al	RT)	Respondents	121		





### **UNDERSTANDING THE CHARTS AND TABLES**

Much of the information presented in this report is presented in the form of charts or tables, which is why it is important to be able to read them accurately and make use of the information contained within them. The following elements are used to present the data in the charts and tables:

Element	Description
Raw	The Raw score is simply the (un-scaled) sum of correct responses the respondent receives on the test scale.
Attempted (Att.)	Is the number of questions the respondent has attempted to answer regardless of whether the answers were correct or not.
STANINE Score	Is a standardised scale used to compare respondent results. The STANINE Score has a Mean of 5 and Standard Deviation of 2. This score is presented as a 9-point scale in the results chart.
Standard Error of Measurement (SEm)	The Standard Error of Measurement is a measure of the range within which an individual's hypothetical 'true' score is likely to fall within 68% probability. It is presented as blue error bar surrounding the respondent's obtained STANINE score in the results chart.
T Score	Is another standardised score used to compare respondent results. It is similar to the STANINE score, though has a Mean of 50 and Standard Deviation of 10. This score is presented as a numerical value in the results chart.
Percentile Score (%ile)	A value which reflects the percentage of people in a sample who score below a given raw score. This score is presented as a numerical value between 0 and 100 in the results chart.
Percentage Items Correct	Is the percentage of the number of correct responses over total number of items.
Percentage Items Attempted	Is the percentage of the number of items attempted over total number of items.
Percentage Accuracy	Is the percentage of the number of correct responses over the number of items attempted.





## **ABSTRACT REASONING**

### **Result Description**

Sam Sample's score on the Abstract Reasoning Test is within the top 5% of the chosen reference group, indicating that he has an exceptional level of natural (i.e., untutored) reasoning ability. This score indicates a very strong capacity to correctly identify complex patterns in material that he has not encountered before, without the need to use contextual cues to aid his understanding. Most importantly, this score also demonstrates an excellent ability to understand the logic that underpins patterns that change independently across two dimensions, and to deduce the consequences of these patterns without reference to previous knowledge and experience. As a result, he would be expected to have a very high level of 'mental flexibility' and an exceptional skill at logically analysing and understanding novel problems. Moreover, he is likely to be much more able than most typical graduate level staff to rapidly perceive the significance of complex new situations, and correctly extrapolate the (future) consequences of the logical patterns and relationships he has identified in these situations. Thus, he would be expected to have a very strong ability to think strategically and take a 'big picture' perspective.

As his ability to use abstract logic to understand unfamiliar situations and problems is likely to be well in excess of that of most graduate calibre staff, he should be able to understand even the most abstract concepts with relative ease, and grasp their subtleties very quickly. He should be expected to rapidly understand new material, even if it is extremely complex in content. Moreover he should be able to learn complex, intellectually demanding material much more quickly, and with greater ease, than most graduate calibre staff. As a result, he is likely to be able to put high level training and instruction to very good use.

RE	SULTS CHART									
Scale	Description	Raw	Att.	1 2	2 3 4	5 6	7 8	9	T Score	%ile
ART	Abstract Reasoning	30	35					9	73	99
Norm Used Abstract R	d: easoning = 121 Respondents									
Scale	Description	Percentage Items Correct		Percentage Items Attempted			ns	Percentage Accuracy		
ART	Abstract Reasoning	86	86		100			86		