INFORMATION BRIEF

General Aptitude Mobile Evaluation (GAME)

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An engaging predictor of job success.

A person's cognitive aptitude is a powerful predictor of their future work performance and how suitable they are for the job.

Cognitive aptitude – often referred to as general intelligence or "g" - refers to the ability to solve problems, digest and apply information, learn new skills, and think critically. The General Aptitude Mobile Evaluation (GAME) uses an engaging image-based format to assess cognitive aptitude, and is one of Criteria's most popular aptitude tests.

MEASURES

- Attention to detail
- Verbal reasoning
- Numerical reasoning
- Ability to digest and apply new information

PREDICTS

Predicts how well someone will acquire, organize, retain and apply information on the job

QUESTIONS

Candidates complete 3 game-based tests, each with 40 questions

TIME

GAME is timed: each question has a 6 second time limit. The whole assessment takes 5-6 minutes to complete.

Why is cognitive aptitude so important?

People who score well on cognitive aptitude tests use their high-level information processing skills to solve job-related problems more effectively, and to learn on the job more quickly. As a result, people with strong scores tend to perform better on the job and in training.

A strong and long-standing body of research demonstrates that cognitive aptitude is one of the most accurate predictors of job success:

- 1.6x as predictive as unstructured interviews
- 4x as predictive as experience.

Research has also shown cognitive aptitude to be valid, reliable and strongly predictive of future work performance. People with high levels of cognitive aptitude can:

- Perform work tasks more accurately and successfully
- Make decisions more effectively
- Use reasoning skills and solve problems
- Respond intelligently to new or complex circumstances.

How does the GAME measure cognitive aptitude?

The GAME is a timed test with 3 subtests. Each subtest has 40 question pairings, that assess three core areas of cognitive aptitude: attention to detail, verbal reasoning and numerical reasoning abilities.

The items in the test are designed to measure each candidate's abilities in a relatively pure and standardized way by tapping into their underlying ability to process information in several different ways.

The questions in GAME are adaptive to the candidate's responses. When a candidate gets a question correct, they are provided a slightly more difficult question, and when they get a question wrong, they are presented a slightly easier question. This means that a candidate's ability can be much more accurately identified when compared to a static cognitive assessment.

Which jobs is the GAME applicable for?

Cognitive aptitude is a critical underlying factor for almost every job, since all jobs require people to process information, solve problems and learn new information. It's also critical for jobs that involve a great deal of training, such as apprentice, intern or graduate roles.

The GAME provides an innovative, fun approach to assessing cognitive aptitude and is popular with customers assessing for entry- to mid-level roles such as customer service representatives, retail salespeople, administrative assistants, machine operators and food service staff.

What abilities does the GAME measure?

The GAME assesses three underlying abilities that, together, provide an overall measure of a candidate's cognitive aptitude.

Attention to Detail

Ability to focus on detail-orientated tasks with thoroughness and accuracy.

Verbal Reasoning

Reading ability and comprehension of words, which is related to communication skills.

Numerical Reasoning

Quantitative problem-solving and number fluency.

What score ranges are available?

The GAME includes a series of suggested score ranges that help you understand how each candidate's results meet the range that has been associated with successful performance in various roles. These ranges are based on large samples of prior scores from individuals applying for or occupying similar roles and are supported by multiple validation studies.

The suggested score ranges available include:

- Accounting / Finance
- Administrative Assistance / Clerical
- Analyst
- Bank Teller
- Cashier
- Childcare Worker
- Collections
- Computer Programmer / Software Engineer
- Customer Service Representative
- Dispatcher
- Driver
- Financial Analyst / Advisor
- Food Service
- Front Desk / Reception

- Machine Operator
- Manufacturing / Production
- Medical / Dental Assistant
- Production Manager / Supervisor
- Project Manager
- Recruiter
- Retail Sales Representative
- Retail Supervisor
- Sales Manager
- Sales Representative
- Security Guard
- Senior Manager / VP
- Store Manager
- Supervisor

Can I create my own score ranges?

You can create your own score ranges within the Criteria platform. We can work with you to gather and analyze results from your own organization (either from incumbents or using data from your applicant pool) to build appropriate score ranges for your roles.

What is the candidate experience like?

Game-based design

The GAME uses a game format to evaluate candidates for job-related aptitudes. Candidates tend to prefer game-based assessment when compared to traditional assessments, experiencing greater motivation to complete and more engagement with the assessment.

### Flexible testing on any device

The GAME is device-agnostic. This means candidates can take the test on any digital device they choose – a mobile phone, tablet, laptop, or desktop – in any location and at any time.

Example questions

The GAME contains 120 items in total, with each question having a 6 second time limit.

Example Attention to Detail question

Attention to detail is the ability to efficiently allocate cognitive resources to achieve thoroughness and accuracy when accomplishing tasks. In Robot Inspector, candidates are asked to identify if there are differences between two robot images.
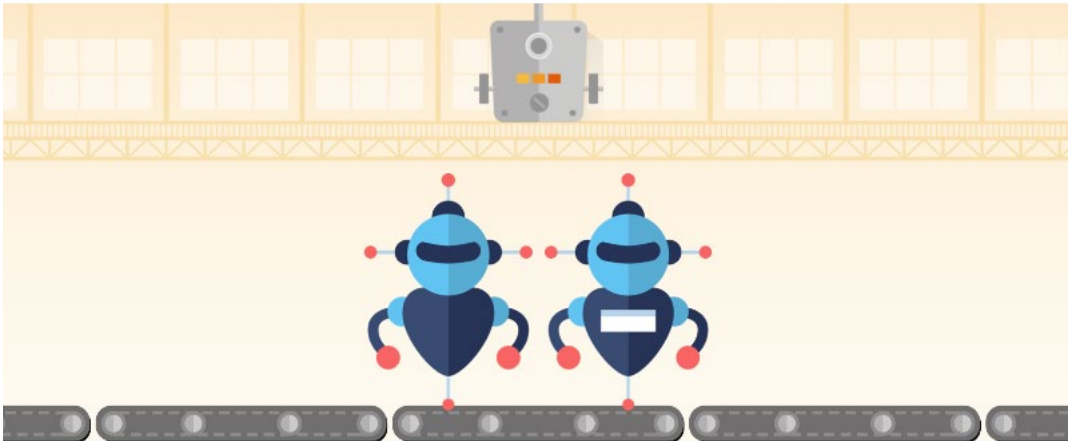
Example Verbal Ability question

Verbal ability questions require candidates to understand relationships between words or comprehend verbal information. In Words of a Feather, candidates are asked if pairs of words have similar or different meanings.
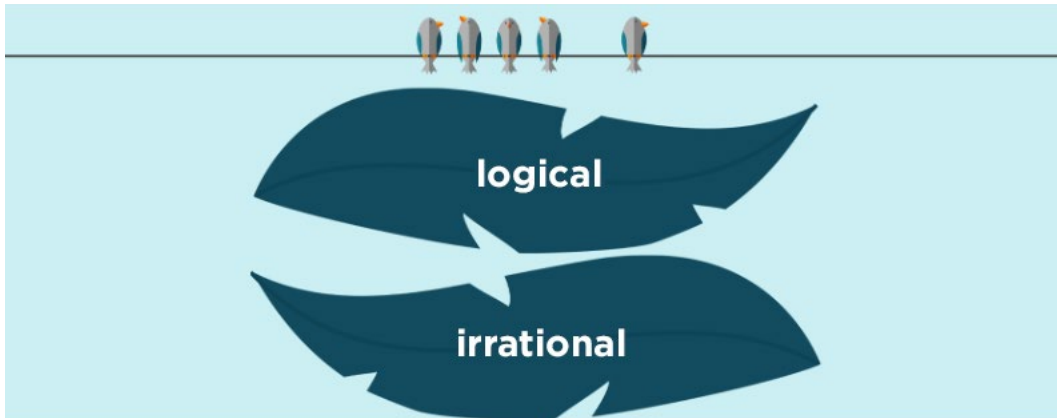
Example Numerical Reasoning question

These questions ask candidates to complete calculations of increasing complexity. In Weigh Station, candidates are asked to identify which truck represents the greatest value.
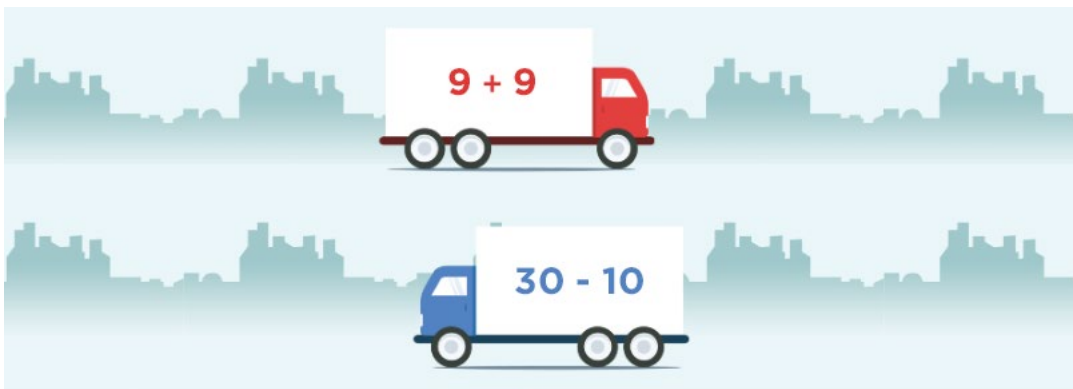
Ensuring a fair candidate experience

Like all of our assessments, the GAME can be completed remotely over the internet under unsupervised conditions. This provides a high level of flexibility and convenience for the candidate. We adopt the following best practice strategies to ensure online security.

Adaptive item bank

To enhance test security, the GAME is an adaptive assessment that draws on an item bank of hundreds of individually optimized test items. The questions presented to a candidate are based on their previous responses. This means that no two candidates will likely receive the exact same questions, giving you confidence in their individual results.

Secure online assessment

Our online testing engine is delivered using secure web technology, which allows us to ensure that assessment security and integrity is maintained, and that assessment time is tracked accurately.

Detailed assessment session logging

From the moment the candidate logs in to start their assessments to the moment they finish, we create detailed test logs of the candidate's testing session, including time spent in the assessment, internet connectivity, and individual issues and actions within each game played.

Reporting

After candidates complete testing, you can access two different reports.

- ✓ A **Candidate Summary Report** that provides a high-level overview of a candidate's results on the GAME and any other Criteria assessments they've completed.
- ✓ A **Candidate Score Report** that provides detailed information of a candidate's scores on the GAME.

Candidate Summary Report

The candidate summary report includes a quick snapshot of a candidate's results for each test they've completed. If you've enabled it, the Talent Signal - which displays a weighted average of a candidate's performance across individual tests - will also appear on the summary.

Vince Sample
Position: Sample Test Portfolio
Date: May 23, 2022
Event ID: ABC-D1Fg-2H3I-jklmN

61 | Talent Signal*

Criteria Candidate Summary

GAME — **General Aptitude Mobile Evaluation**
Measures problem solving, critical thinking, and learning ability

68 Overall Score Percentile

Attention to Detail Percentile	49
Verbal Ability Percentile	87
Numerical Reasoning Percentile	68

CMRA — **Criteria Mechanical Reasoning Assessment**
Measures mechanical aptitude, or ability to learn to use and maintain equipment and machinery

22 Raw Score
60 Percentile

Candidate Score Report

The score report gives you more detailed results for a single candidate. It includes:

- ✓ Candidate information (name, position, date completed)
- ✓ A **Results Summary**, which displays the candidate's overall percentile score.
- ✓ A **Selected Score Range** section showing what score range has been applied and if the candidate has met that range.
- ✓ A **Results Details** section, displaying their percentile scores for each of the three sub-categories measured by the GAME.

Vince Sample
Position: Sample Test Portfolio
Test Date: June 5, 2023
Test Event ID: ABC-D1Fg-2H3I-jklmN | Test Ver: 1.0

Criteria
Score Report

APTITUDE TEST

General Aptitude Mobile Evaluation

GAME provides your candidates with a brand positive, mobile, anywhere, anytime test of their abilities. People who score better on GAME are more likely to excel at solving problems, understanding and applying information, learning new skills, and thinking critically.

Results Summary

68
Percentile

Selected Score Range

Software Development
Suggested Range: 63-100

✓ In Range

Results Details

Vince Sample achieved an overall score of 68th percentile, meaning that Vince scored better than 68% of the people who have taken this assessment. Below are details of how Vince performed on each specific area within the test.

Attention to Detail Percentile — 49

Verbal Ability Percentile — 87

Numerical Reasoning Percentile — 68
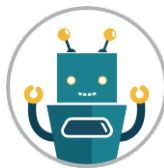
The game Robot Inspector measures the ability to focus on detail-oriented tasks with thoroughness and accuracy.

The game Words of a Feather measures verbal reasoning, which dictates communication skills and comprehension.
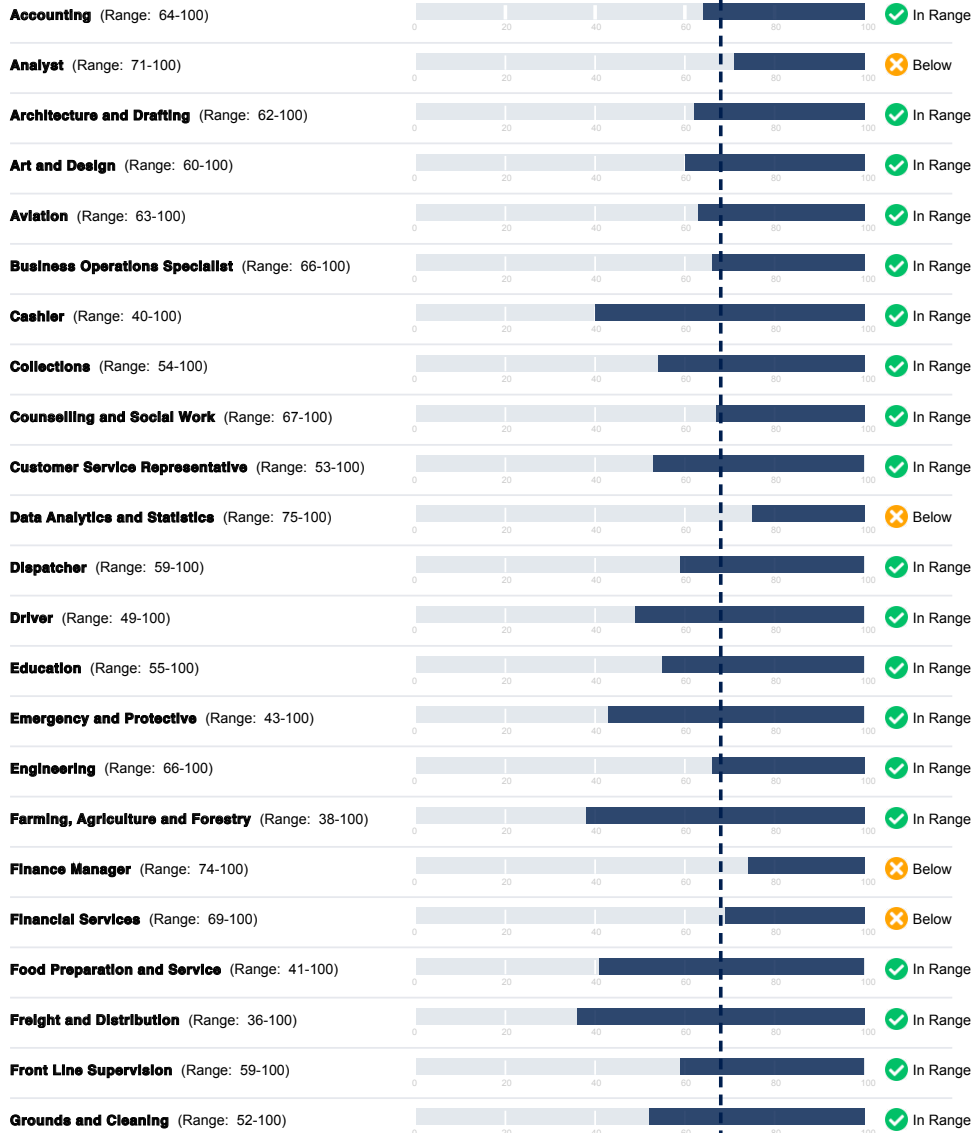
The game Weigh Station measures numeracy, quantitative problem-solving, and number fluency.

In the **Suggested GAME Score Ranges by Position** section, you'll see how the candidate's percentile score compares to all of the available score ranges for the GAME.

Suggested GAME Score Ranges by Position

*Based on global norms compiled by Criteria Corp.

Vince Sample | Score: 68

Position	Status
Accounting (Range: 64-100)	✓ In Range
Analyst (Range: 71-100)	✗ Below
Architecture and Drafting (Range: 62-100)	✓ In Range
Art and Design (Range: 60-100)	✓ In Range
Aviation (Range: 63-100)	✓ In Range
Business Operations Specialist (Range: 66-100)	✓ In Range
Cashier (Range: 40-100)	✓ In Range
Collections (Range: 54-100)	✓ In Range
Counselling and Social Work (Range: 67-100)	✓ In Range
Customer Service Representative (Range: 53-100)	✓ In Range
Data Analytics and Statistics (Range: 75-100)	✗ Below
Dispatcher (Range: 59-100)	✓ In Range
Driver (Range: 49-100)	✓ In Range
Education (Range: 55-100)	✓ In Range
Emergency and Protective (Range: 43-100)	✓ In Range
Engineering (Range: 66-100)	✓ In Range
Farming, Agriculture and Forestry (Range: 38-100)	✓ In Range
Finance Manager (Range: 74-100)	✗ Below
Financial Services (Range: 69-100)	✗ Below
Food Preparation and Service (Range: 41-100)	✓ In Range
Freight and Distribution (Range: 36-100)	✓ In Range
Front Line Supervision (Range: 59-100)	✓ In Range
Grounds and Cleaning (Range: 52-100)	✓ In Range

Psychometric properties

Normative sample

The norms for the GAME were developed using a sample of 66,852 individuals. This sample was made up of adults aged 18 and older, including both incumbent employees and job applicants. These individuals were being assessed for employee selection and/or benchmarking purposes, together representing a sample of individuals from hundreds of different companies whose current positions included managerial, technical services, customer service, and sales positions.

Based on the large volume of position-specific data that has been gathered on the GAME, Criteria has established score expectations and score ranges for various occupations. The published job-specific score ranges are visible on the GAME score reports and within the benchmarking tools in the Criteria platform.

Reliability

Reliability typically refers to the internal consistency of a test, or the extent to which individual items on a test measure the same construct and result in similar test scores. The most common measurement of test reliability is Cronbach's alpha, a coefficient of reliability often referred to simply as the alpha coefficient.

Based on a sample of 361 test-takers, the alpha coefficients for the tests in GAME are $\alpha = 0.90$ for Attention to Detail, $\alpha = .94$ for Verbal Reasoning, and $\alpha = .92$ for Numerical Reasoning. Psychometricians generally consider alpha coefficients of .70 or above to constitute an acceptable level of reliability, while alpha coefficients of .90 or above constitute excellent test reliability. Therefore, the alpha coefficients demonstrated by the GAME are extremely high and indicate a high degree of reliability. These alpha coefficients compare favorably to other leading measures of aptitude, where alpha coefficients of .90 to .95 are typical.

Construct validity

Construct validity is established through evidence for convergence, or the relationships demonstrated between a test with other well-established tests that are purported to measure the same construct or attribute. The GAME has demonstrated construct validity through its strong correlations with other leading measures of cognitive aptitude.

For example, GAME demonstrated a very strong correlation ($r = .71$, $p < .01$, $N = 361$) with the Criteria Cognitive Aptitude Test, or CCAT. The CCAT is a widely used and scientifically supported assessment of cognitive ability that strongly correlates ($r = .47$, $p < .01$, $N = 1,317$) with overall job performance.

Criterion-related validity

Criterion validity refers to the extent to which test scores relate to a relevant outcome such as job performance. Criteria has conducted numerous criterion validity studies in collaboration with research partners and customers across many different industries. These studies have demonstrated evidence for the criterion validity of the GAME in a wide variety of organizational settings. Such validity studies involve conducting statistical analyses that compare test results with job performance metrics. The organization utilizing the test typically provides performance data for its employees, and the validity study includes a statistical measure of the strength of the relationship (i.e., correlation) between test scores and job performance.

Many criterion validity studies have shown that GAME scores correlate strongly and significantly with job performance for a variety of jobs. The GAME functions as an especially effective predictor of performance for jobs that require enhanced abilities in the areas of problem-solving, learning, critical thinking, and verbal and mathematical reasoning. Examples of jobs for which the GAME has demonstrated high predictive validity evidence include customer service representatives, sales and retail staff, and many others.

Case Studies

SBMA reduced time spent hiring by 63%
View case study

Software company predicts salespeople who generate 2-4x more revenue
View case study