



Preparing for psychometric tests

Employers and careers services, amongst others, are increasingly aware of the value of psychometric tests. 'Psychometric' means the tests have been carefully developed to measure abilities, aptitudes, skills, interests or aspects of personality. The ones you will most commonly encounter are 'ability'/'aptitude' tests or 'personality' measures.

THE ADVANTAGES OF PSYCHOMETRIC TESTS

Psychometric tests are an additional opportunity to demonstrate your skills

In a careers or job interview, it is impossible to give the full picture of your skills and personality. A person's c.v. and qualifications may say very little about him/her if his/her strengths lie in areas which are not covered by conventional qualifications. Certain skills are, in fact, better measured using carefully constructed psychometric tests (e.g. problem-solving, spatial ability).

Psychometric tests provide a fairer assessment of your skills

Psychometric tests provide an objective way of assessing your strengths and weaknesses. They are developed by trained psychologists using rigorous methods to ensure that the tests are unbiased and do not contain material which could favour certain candidates. The tests are 'standardised', meaning they have been tested on people of a similar age and background and performance is interpreted relative to that standard.

Psychometric tests are also objective in terms of scoring. Most tests use multiple-choice questions with set right and wrong answers, so there is no room for bias in marking.

Psychometric tests can help you understand more about your abilities

Psychometric tests are useful to employers because, having identified which skills or 'competencies' are necessary to perform well in a given job, psychologists can provide tests which are tailor-made to assess those skills.

Finding a 'best-match' between person and job is a two-way process, however; a psychometric test may suggest that you are unsuitable for a certain job, but if the job does not use your skills and interests, you are unlikely to find it satisfying. It follows that in the case of personality tests, it is in your interest to be honest! It is worth remembering to ask for feedback from any psychometric test.

The answer is in the question!

Most **ability tests** ask multiple-choice questions, where you have to choose one correct answer from several answer options. The answer options include 'distractors' - incorrect responses such as errors which are easily made or responses which resemble the correct answer in some way. There are many ideas about how to spot the correct answer from the distractors (such as spotting patterns in answers or selecting from 'middle' answers) but it is best to ignore this kind of strategy. Psychometric tests are increasingly sophisticated and are designed to ensure that you cannot perform well by the 'multiple-guess' approach. Guidance on how to approach a test can be found in the section titled 'The test itself'.

There are no right or wrong answers to **personality questionnaires**. These are untimed and you are usually asked not to spend too much time thinking about each question but to give a quick and honest response. Do not try to second-guess the responses you *think* should be given – some personality questionnaires can detect deliberate distortion of answers and you could be asked to expand upon your responses in an interview.

WHAT DOES A PSYCHOMETRIC TEST LOOK LIKE?

Personality questionnaires and ability tests are either paper-and-pencil based or may be taken on computer.

Paper-and-pencil tests often come as a booklet with a separate answer sheet. The answer sheet usually has printed boxes and you indicate your answer to each question or statement by marking the relevant box. You are instructed what to do by a person administering the test.

Computerised tests come in different formats. You are given instructions either by an administrator or on the computer screen itself. In some cases, tests are completely computer-administered and you familiarise yourself with the instructions at your own pace and choose when to start the timed test. You usually indicate your answers by clicking on an answer option using the mouse.

WHAT WILL I BE ASKED TO DO?

Ability tests typically measure three areas of skill:

Verbal skills – reading and understanding or deducing information.

Numerical skills – solving mathematical problems.

Abstract or Non-verbal skills – solving visual puzzles or problems by reasoning e.g. identifying the next shape in a sequence of shapes.

Examples of each of these types of test are given below, to give you an idea of the types of questions you may encounter. Read the instructions for each type of test and then have a go at answering the questions that follow. The answers to the questions are given on the last page.

Verbal Skills

1. Read the passage of information and then indicate whether the statements that follow are 'True' or 'False' on the basis of the information in the passage. If you think there is not enough information to make a definite decision indicate 'Can't tell'.

The destruction of the world's forests has proceeded at an alarming rate over the past two decades, mainly as a result of economic pressures in the developing world. Forests of growing trees absorb carbon dioxide, but this is released into the atmosphere when they are cut down and allowed to rot, or are burnt. The tropical rain forests, home to half the world's plant and animal species, are of special concern.

Statement: Growing trees contain carbon dioxide.

True

False

Can't tell

Statement: Countries in the developing world get much of their wood from tropical rain forests.

True

False

Can't tell

2. You will see a pair of words that are related in some way. You have to work out how this pair is related and then select a word, from the list of options on the right, which could replace the question mark in the second pair. The relationship between the second pair of words has to be the same as the relationship between the first pair of words.

<i>find</i> is to <i>hidden</i>	a) <i>stolen</i>
<i>repair</i> is to ?	b) <i>irregular</i>
	c) <i>mend</i>
	d) <i>lost</i>
	e) <i>broken</i>
<i>sleeve</i> is to <i>arm</i>	a) <i>kick</i>
<i>boot</i> is to ?	b) <i>sock</i>
	c) <i>foot</i>
	d) <i>toe</i>
	e) <i>shoe</i>

3. You will see four words which are all related in some way. You have to work out how these words are related and then select the word, from the list of options on the right, which has a similar meaning.

<i>create</i>	a) <i>complain</i>
<i>make</i>	b) <i>construct</i>
<i>produce</i>	c) <i>result</i>
<i>build</i>	d) <i>argue</i>
	e) <i>copy</i>
<i>stretch</i>	a) <i>strain</i>
<i>extend</i>	b) <i>compress</i>
<i>enlarge</i>	c) <i>distort</i>
<i>grow</i>	d) <i>add</i>
	e) <i>expand</i>

Numerical Skills

4. You will see four numbers in a series followed by a question mark. You have to work out the relationship between the series of numbers and then identify the number, from the list on the right, that belongs in place of the question mark.

5 6 8 11 ?	a) 13
	b) 14
	c) 15
	d) 16
	e) 17
3 6 12 21 ?	a) 32
	b) 33
	c) 34
	d) 35
	e) 36

5. Look at the numerical information and then use this information to answer the questions below. Select the correct answer for each question from the five options given.

The table shows the price of shares in three companies.

<i>Company</i>	<i>Share price</i>
<i>A</i>	<i>45p</i>
<i>B</i>	<i>130p</i>
<i>C</i>	<i>88p</i>

Question: What is the value of 90 shares in Company A?

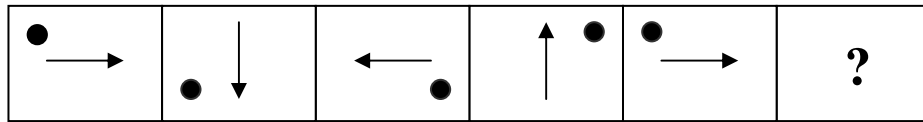
3950p 4050p 4200p 4350p 4500p

Question: Shares in Company B lose 20% of their value. If the value of shares in Company C remains the same, what is the difference in the value of a share in Company B and a share in Company C?

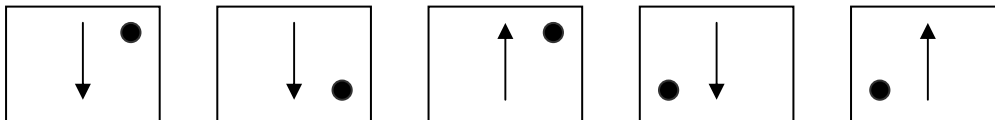
16p 26p 28p 42p 68p

Abstract or Non-verbal Skills

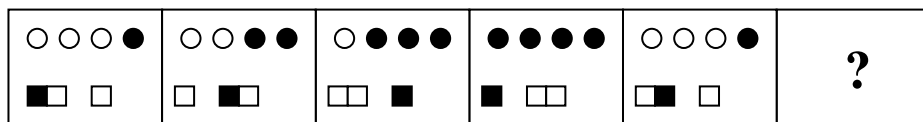
6. You will see a series of shapes followed by a blank shape with a question mark in it. You have to work out how the series of shapes is related and then identify the shape that goes in place of the question mark.



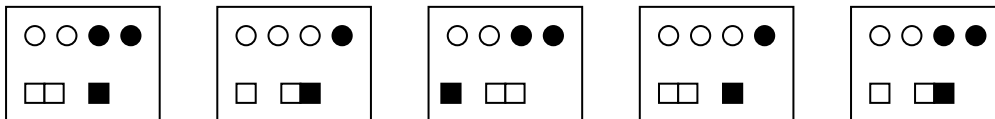
Which is the next shape in the sequence?



a b c d e

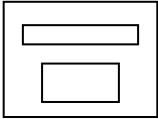
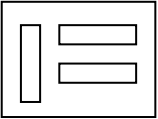
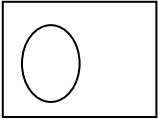
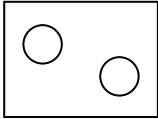
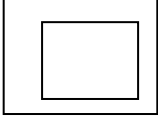
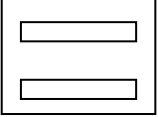
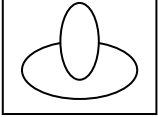
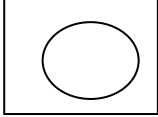
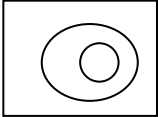



Which is the next shape in the sequence?



a b c d e

7. You will see two sets of shapes; Set A and Set B. All the shapes in Set A are similar in some way and all the shapes in Set B are similar in some way. Sets A and B are not related to each other. You have to identify whether further shapes belong to Set A, Set B or neither set.

Set A		Set B	
			
			
<p><i>Which set, if either, do the following shapes belong to?</i></p>			
			
<i>Set A</i>	<i>Set B</i>	<i>Neither</i>	
			
<i>Set A</i>	<i>Set B</i>	<i>Neither</i>	

WHAT CAN I DO TO PREPARE FOR AN ABILITY TEST?

General preparation

- Test-taking is a skill which can be developed. You can improve your performance with practice, so start preparing as early as you can.
- Ask for sample tests from your careers service and practise taking them. In the case of prospective employers, find out what kind of tests you will be required to do and ask if example questions are available.
- Spend time looking at the formats of different tests and answer sheets. This will help you to become more comfortable with them so that you feel on familiar ground when you see the test paper.
- Practise timing yourself. Pacing yourself is a vital skill in timed tests and it is a skill that you can improve with practise. Practising with other people is a good way to create test conditions.
- Review basic maths, particularly calculations you know you find difficult. Think of possible mathematical operations that could be required and practise them. Make sure you can interpret graphs, tables, pie charts, etc.
- Improve your vocabulary and comprehension by reading. Look up the meanings of words you are unsure of. Practise reasoning through what is clearly true or untrue from passages of information. Review your understanding of grammar and practise spotting associations between words or types of words.
- Take care of your physical health and get several good night's sleep in a row before the test.
- If you have experienced serious problems with nerves or sleeplessness around exams, it is worth getting advice about how to deal with this in advance.

On the day before the test

- Check the time and place of the test, and make sure of your travel arrangements.
- Review anything you feel you need to, but don't overdo it; set yourself a certain amount of time to do this and then allow yourself an evening doing something completely different.
- Try to build a positive mental attitude; think positively about your abilities and try to stop negative thoughts. Distract yourself by doing something that you know you will enjoy e.g. read a good book, watch a film, do something that makes you feel good about yourself.
- Eat a good meal and get a good night's sleep.

On the morning of the test

- Breakfast is important but avoid 'heavy' foods which can make you feel tired during the test. Some people consider unsugared foods, such as cereal and bananas, good 'brain food'.
- Collect everything you need to take into the test. Some people like to take a drink or something sweet into a test. Don't forget your glasses or hearing aid, if you wear them.
- Try to remain calm and to maintain a positive mental attitude.
- Leave yourself plenty of time to get ready and get to the test centre so that you do not panic.

The test itself

- Listen to and read the test instructions carefully. If you are unclear about something, ask.
- You will be given time to read the instructions before the timed part of the test begins. Example and/or practise questions are usually given to help you understand what you have to do. Do work through these to make sure you are clear about what the test requires you to do.
- Try not to pay attention to other people taking the test around you. Remain focused on the test.
- Ability tests are usually strictly timed, so it is important to work as quickly and as accurately as you can. If you are stuck on a

question, do not waste time on it - go on to the next one and come back to it at the end if you have time.

- The best approach with multiple-choice questions is to try and work out the answer yourself, and then see if your answer is one of the given options. If your answer is not one of the given options, check your reasoning or calculations. If you are absolutely stuck, make an educated guess rather than picking an answer randomly; eliminate answers you know to be wrong and then go with your best guess from the remaining options. In the case of True/False questions, absolute words such as 'always', 'never', 'only', 'must', 'completely' sometimes provide clues to the correct answer.
- Only change your answer if you are sure you have made a mistake. If you are unsure, it is probably best to stick with your first answer.

PLEASE NOTE: These points are for general guidance only. You should always follow the specific instructions you are given for the test or questionnaire you are taking.

DEVELOPING YOUR SKILLS

Below is a checklist of activities you can do to practice the kinds of skills needed for Verbal, Numerical and Abstract tests. The more time you spend on these activities, the more it will help your test performance. In the couple of weeks before a test, try and spend at least an hour on each activity. Use the tick boxes provided to record the activities you have completed.

Verbal

- ☐ Take time to think carefully about arguments in newspapers, books etc. Ask yourself questions like 'What evidence has been presented for or against the argument', 'Is there sufficient evidence to justify the conclusion', 'Is this argument logical', 'How could the argument be criticised'.
- ☐ Look up the meaning of any words you are unsure of.
- ☐ When reading, think about the more complex words. What words have the same or similar meaning and so could be used instead (it may be useful to use a thesaurus)? Also, what words mean the opposite?

Numerical

- ☐ Make sure you are generally fluent with using numbers; do simple calculations in your head or on paper rather than using a calculator.
- ☐ Practice the basic numerical functions; addition, subtraction, multiplication and division.
- ☐ Check that you are comfortable using different numerical formats and understand how to do basic conversions between formats. Useful areas to revise can include fractions, decimals, percentages, angles, ratios, area and volume.
- ☐ Take time to look at numerical information presented in different ways such as tables, graphs, pie charts and text. Make sure you understand what the information presented in these different ways is telling you.

Abstract

- ☐ Abstract tests are usually about finding patterns and identifying categories. Spend time thinking about what features make objects alike and what features make them different.
- ☐ Books containing logic puzzles are readily available. Try buying a book of puzzles and completing them.

Answers to practice questions

- | | | | |
|---------------------|---------|-------------------|---------|
| 1. True, Can't tell | 2. e, c | 3. b, e | 4. c, b |
| 5. 4050p, 16p | 6. d, e | 7. Set B, Neither | |