



Academic excellence for
business and the professions

Assessment Centres and Psychometric Testing

IN2015

Monday 5th November

What is the missing letter?

E C O

B A B

G B N

D B ?

Correct answer: **H**

Explanation: Convert each letter to its numerical equivalent in the alphabet e.g. the letter "C" is assigned the number "3". A = 1, B = 2, C = 3, D = 4

Afterwards, for each row, multiply the numerical equivalents of the first two columns in order to calculate the letter in the third column.

Learning Outcomes:

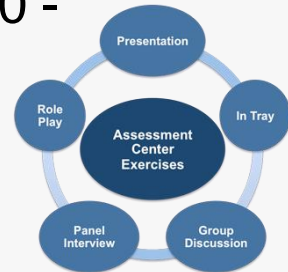
- At the end of the session you will have developed an understanding of the benefits of assessment centres and why companies use them.
- You will be able to describe what activities are included in an assessment centre and what each activity involves.
- Compare and contrast how different companies run their assessment centres.
- Apply your knowledge of psychometric testing and use this when making placement applications.

What are assessment centres and why do we have them?

- Aimed at assessing candidates for opportunities on a '**level playing field**' which allows for a broader range of selection methods.
- **Assess different competencies** through a range of different tasks
- They give the employer an opportunity to **assess and differentiate between candidates who seem very similar** – (On their application form)
- Usually occur towards the end of the recruitment process
- Up to a 1/3 of companies use assessment centres
- It gives you the opportunity to decide whether the **company/job is the right fit for you.**

How are assessment centres run?

- Can be anywhere from half a day to multiple days
- Can be outsourced to recruitment companies – This may mean that you are not interviewed by someone from the company you've applied for.
- Assessment days can be held anywhere from the employers offices to a hotel or training facility.
- Numbers of candidates attending; 20+ or as little as between 5-10 - usually split into smaller groups if there are lots of candidates.



Assessed elements can include...

- Group exercises
- In/e-tray exercises
- Case studies
- Role plays
- Written exercises
- Presentations
- Psychometric tests
- Interviews
- Social/informal events

Example Assessment Day

09.00 - Arrival and introduction

09.15 - Employer presentation and
group ice-breaker exercise

10.00 - Psychometric tests

11.30 - Individual task: In-tray exercise

12.45 - Lunch

13.45 - Group exercise: Case study

14.45 - Assessment interviews

16.15 - Individual presentations

17.15 - Evaluation

17.30 - Finish

Assessed elements can include...

Group exercises

Group exercises typically assess a candidates behaviour in a group, and the overall group dynamics involved in the exercise. Typical factors assessed in a group exercise include;

- Team working ability
- Social skills, confidence and communication skills
- Business acumen
- Leadership potential and influence
- Capacity to deal with deadlines under pressure
- How compatible a candidate's skills and behaviour are for the role
- Interpersonal skills, i.e. listening skills, persuasion, diplomacy, mediation, composure, patience etc.
- Decisiveness and critical thinking ability



Because of the workplace relevance of these exercises, recruiters can use group exercises to predict how a candidate will perform in the work place, making this a useful selection tool. Not only can the group exercise be used to highlight and identify strengths and role relevant behaviours, it can also be used to identify negative behaviours such as aggression, short-temperedness and single mindedness. It is key to contribute but not dominate!

Group Activity – NASA exercise: Survival on the moon

You are a member of a space crew originally scheduled to rendezvous with a mother ship on the lighted surface of the moon. However, due to mechanical difficulties, your ship was forced to land at a spot some 200 miles from the rendezvous point. During re-entry and landing, much of the equipment aboard was damaged and, since survival depends on reaching the mother ship, the most critical items available must be chosen for the 200-mile trip.

There are 15 items left intact and undamaged after landing. Your task is to rank order them in terms of their importance for your crew in allowing them to reach the rendezvous point.

Place the **number 1 = most important item**
number 2 = second most important, and so on
through to **number 15 = least important**.



Within your group rate the equipment from 1-15 (1 being the highest and 15 the lowest)

- Box of matches
- Food concentrate
- 50 feet of nylon rope
- Parachute silk
- Portable heating unit
- Two .45 calibre pistols
- One case of dehydrated milk
- Two 100 lb. tanks of oxygen
- Stellar map
- Self-inflating life raft
- Magnetic compass
- 20 litres of water
- Signal flares
- First aid kit, including injection needle
- Solar-powered FM receiver-transmitter



Answers - Item Ranking & NASA's Reasoning

- 1 - Two 100 lb. tanks of oxygen** - Most pressing survival need (weight is not a factor since gravity is one-sixth of the Earth's - each tank would weigh only about 17 lbs. on the moon)
- 2 - 20 litres of water** - Needed for replacement of tremendous liquid loss on the light side
- 3 - Stellar map** - Primary means of navigation – star patterns appear almost identical on the moon as on Earth
- 4 - Food concentrate** - Efficient means of supplying energy requirements
- 5 - Solar-powered FM receiver-transmitter** - For communication with mothership
- 6 - 50 feet of nylon rope** - Useful in scaling cliffs and tying injured together
- 7 - First aid kit, including injection needle** - Needles connected to vials of vitamins, medicines, etc. will fit special aperture in NASA space suit

NASA Ranking - ctd

- 8 - Parachute silk** - Protection from the sun's rays
- 9 - Self-inflating life raft** - CO2 bottle in military raft may be used for propulsion
- 10 - Signal flares** - Use as distress signal when the mothership is sighted
- 11 - Two .45 calibre pistols** - Possible means of self-propulsion
- 12 - One case of dehydrated milk** - Bulkier duplication of food concentrate
- 13 - Portable heating unit** - Not needed unless on the dark side
- 14 - Magnetic compass** - The magnetic field on the moon is not polarized, so it's worthless for navigation
- 15 - Box of matches** - Virtually worthless - there's no oxygen on the moon to sustain combustion

Group Activity - Positive Behaviours

- Make positive and constructive contributions
- Provide original insights and contributions
- Be pro-active and flexible around roles
- Summarise discussion and move it on when required
- Monitor activity and remind group of objective if they stray from this
- Ensure group keep to time scales
- Demonstrate a positive, can-do attitude
- Support the others in the group
- Respect and encourage contributions from all team members
- Acknowledge positive contributions
- Provide objective feedback
- Build on points they make
- Involve those who don't contribute
- Argue your case persuasively but...be prepared to compromise



Group Activity - Negative Behaviours

- **Don't** criticise, ridicule or put down other group members
- **Don't** dominate discussion
- **Don't** force your opinions on others
- **Don't** talk over or interrupt other group members (unless you have to in order to make your contribution)
- **Don't** become overly focused on reading the paperwork
- **Don't** switch off and let others do all the work
- **Don't** fall out if your ideas are not accepted
- **Don't** become disengaged from the task
- **Don't** refuse to contribute
- **Don't** be disrespectful to others and their opinions
- **Don't** be negative
- **Don't** be aggressive



Assessed elements can include...

E-trays

You may be given a laptop and a booklet to read through. E-tray exercises can last between 15 minutes to around an hour.

Work simulation exercises –

e.g. An email arrive in your inbox and you need to decide what to do based on the information you are given. More emails then arrive that are linked to your decisions.

They're assessing your ability to make informed decisions in a limited period of time.

You can carry out a practice e-tray here:

<http://www.assessmentday.co.uk/e-tray-exercise.htm>

Written Exercises

You may be required to complete a written exercise, this may depend on the type of role that you have applied for e.g. short essay, letter etc. They are designed to not only test your spelling and grammar but also to test your ability to communicate effectively and professionally in writing in a specified period of time.



Assessed elements can include...

Case Studies

Are a realistic simulation of the type of business or strategic problem you are likely to encounter in the job/placement. Typical competencies assessed in the case study are:

Analytical Thinking
Assimilation of Information
Commercial Awareness

Organising
Decisiveness
Judgement

Innovation
Persuasiveness

You will be presented with a series of fictional documents i.e. company reports, a consultant's report, results from new product research etc. (i.e. similar to the in-tray exercise except documents will be longer). You will then be asked to make business decisions based on the information. This can be an individual exercise or group discussion so that assessors can also score your team working ability.

You may be required to present your proposal in the form of a brief report or presentation. With individual case studies, you will probably present your recommendations at an interview with an assessor. They are assessing not only the solution but your problem solving ability; case study exercises are usually designed not to have one 'correct' answer but reviewing how you justify the decision you propose.

Assessed elements can include...

Group Discussions

A discussion group involves individuals being given a topic or topics to discuss; the nature of the topics can vary but usually they involve an issue of current importance to students or something that's been in the news recently. You are not usually given time to prepare. At the end of the discussion, you may be asked present your group's/individual conclusions, so it's vital to listen as well as to speak up.

1. Take a role in the conversation/discussion
2. Be aware that all contributions (and silences) are being assessed
3. Support others with their comments/contributions, think about body language

Assessed elements can include...

Final interviews (Interview advice will be covered in detail in week 7)

Prepare as you would for any other interview, use the STAR technique when answering questions, research the company, ask the interviewer questions. Could be a one-to-one or a panel based interview.



Social/informal events

i.e. Can include dinners/drinks or overnight stays if assessment centres are scheduled to last longer than one day

Remember you are being assessed throughout, ensure that you are professional in your behaviour and talk to the other students and assessors.

Presentation Skills (to be covered in week 9)

You may be asked to present as part of one of the assessment centre activities, you may be;

- Given a topic to prepare in advance e.g. '*what has been your greatest achievement over the last five years and why?*' Typically asked to present for 10-15 minutes and allow time for questions at the end
- Given a topic on the day, with allocated time to prepare prior to presenting on the day.
- You may be required to present your recommendation for a course of action. In this case you could be presenting to a 'panel' of assessors and you will have to answer questions on your recommendations.
- Presentations could be individual or in small groups.
- It would be worthwhile preparing a small introduction about yourself as you will be more than likely asked to introduce yourself during the day i.e. Name, university, course, career ambitions etc.

Presentation Skills

Rehearse what you want to say, practice to family, friends or even in front of the mirror so that you get the timing right.

Typical competencies assessed in presentation exercises are:

1. Verbal communication
2. Organisation and Planning
3. Professional Style
4. Presenting Information
5. Time Management



Presentation tips for assessment centres

- Try to avoid using too many slides, and keep the information on each to a minimum
- Practice your presentation out loud – record yourself
- Establish who the audience are (Technical Manager, HR, students, assessors) so you can pitch the content according to their level (technically)
- Confirm with the assessors prior to the day about what equipment will be available
- Use simple, clear language and break down what you are going to say
- Look at the audience not the slides
- Remember the assessors will be reviewing how well you answer and respond to questions
- Save your presentation to a USB and email this to yourself also!!



Gamification of the recruitment process

- **GAMIFICATION** = the application of typical elements of game playing (e.g. point scoring, competition with others, rules of play) to other areas of activity, typically as an online marketing technique to encourage engagement with a product or service
- A recent trend with some employers is to rather than invite candidates to job interviews right away, they gave them games that simulate the work environment and test their aptitude
- Not only do candidates learn the basics of the role but it also manages a candidates expectations of the future job i.e. the employer tells their story
- The RAF offers a variety of games that put players into realistic scenarios in different countries such as air cartographer, or air traffic controller. Also most famously the British intelligence service GCHQ used a secret code as entry to apply for a job as spy. Candidates had to decipher the meaning of an encrypted message

<http://www.enterprise-gamification.com>

PwC Gamification of Recruitment: Simulates First Year On The Job



- The Results:

190% Growth in
Job Candidates

Increased Time
Learning About
PwC In Job Process

78% Of Those Who
Complete
Interested In
Working With PwC

Best HR Project for
2014

PwC turned to a serious game called Multipoly (the name is a play on the popular board game “Monopoly”). The game allows job candidates to see just how ready they are to work at PwC by placing them on teams and presenting them business problems similar to those they would encounter on the job. After a simulated job interview, candidates can try out roles such as consultant, senior consultant, and manager. Job candidates must use business acumen, digital skills, and relational skills in order to play the game

<http://www.multipoly.hu/>

Psychometric Tests

Psycho means to do with the mind and metrics are to do with measurement - assessments that measure things to do with the mind...

Main test types

Ability and Aptitude (most common are verbal, numerical and inductive reasoning)

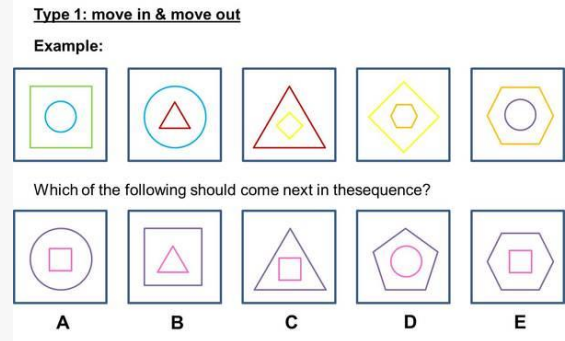
Personality profiles

Interests and values inventories

Situational Judgement tests

Performed under exam conditions – timed, can be paper-based or online

The score can be used as a pass/fail or cumulative



Types of Psychometric Tests

- **Situational Judgement Tests** - Assess how you approach situations encountered in the workplace. Whilst there is some variation in how they are delivered, they typically present you with a written description of a scenario and ask you to select the appropriate response from a multiple choice list. They are designed to test your potential across a number of competencies. Competencies can be defined as: “An underlying characteristic of a person which enables them to deliver superior performance in a given job, role or situation”
- **Numerical Reasoning** – Can test your knowledge of e.g. ratios, percentage increase/decrease, cost and sales analysis, rates and trends and currency conversions etc
- **Verbal Reasoning** - The ability to comprehend and reason using concepts expressed through words. A **verbal reasoning** test is a form of aptitude test used by interviewers to find out how well a candidate can assess **verbal** logic, and how successfully they can extract the correct meaning from complex written information.

Industry research into Psychometric tests

What's inside a Psychometric test?

Test and questionnaires are used to find out about a person's capacities, work style or values. Employers need this sort of information when they want to recruit a new employee or understand the potential and development needs of an existing one. Individuals need to consider their own abilities and personal style when making career choices, so careers advisers are also frequent users of tests.

<http://www.bps.org.uk>

Psychometric tests: what they are and why graduates need to know

If you apply for a place on a graduate scheme with a big graduate employer, chances are you'll be asked to take psychometric tests. They are often used as a filtering mechanism at an early stage in the recruitment process.

As with any kind of test, you can improve your performance by knowing what to expect and by practising. As long as you've done some preparation beforehand, you can approach psychometric tests confident in the knowledge that you're as well placed to succeed as anyone else.

Psychometric tests are impersonal, standardised and objective, and practice tests are readily available. The psychometric test is a level playing field: employers value them because they are a fair way of comparing different candidates' strengths regardless of educational background.

<https://targetjobs.co.uk/careers-advice/psychometric-tests>

Psychometric Test - Video



Activity – Psychometric test practice

- **Activity** – Individually complete the worksheet of questions that are based around actual psychometric test questions
- As a group we will discuss the answers
- You have **4 minutes!**

Activity – Psychometric test answers

1. **64** – The numbers double each time
2. **32** – Each number is the sum of the previous two numbers
3. **150 degrees** - The clock hand moves through 5 hours. Each hour division subtends 30 degrees ($360 / 12$). Therefore the hand will have turned 5×30 degrees = 150 degrees in total
4. **Victory**
5. **C** - The question figure is rotated clockwise 90 degrees each time.
6. **March**
7. 1) AD 2) BE 3) AC 4) DE 5) AB
6) BD

Practice Psychometric tests

<http://www.theonlinetestcentre.com/>

<https://situationaljudgementtest.org.uk/>

<http://www.assessmentday.co.uk/>

<https://www.jobtestprep.co.uk/freepsychometrics.aspx>

<http://www.cubiksonline.com/cubiks/practicetests/>

<http://www.practiceaptitudetests.com/psychometric-tests/>

<https://www.cebglobal.com/shldirect/index.php/en/practice-tests/>

<https://www.practiceaptitudetests.com/situational-judgement-tests/>

<https://www.testpartnership.com/numerical.html>

<https://www.testpartnership.com/verbal.html>

<https://www.testpartnership.com/critical.html>

Do's and Don'ts of an Assessment Centre

- **Do** prepare and research as much as you can
- **Do** dress professionally
- **Do** smile and introduce yourself
- **Do** show interest in company and show an understanding of the job role you applied for.
- **Do** take part in any tours or additional activities/ social events

- **Don't** let everyone else do all the talking
- **Don't** lose sight of the time and fail to complete tasks
- **Don't** talk over others

Student tips/advice from previous assessment centres

IBM - Try not to be overwhelmed by IBM's assessment centre. Demonstrate to them that you're the right candidate and you deserve the placement opportunity. Ensure you complete your research so that you are not surprised by any of the activities.

Microsoft - Be yourself, talk about your strengths, hopes, motivations and if you are unsure of an answer ensure you show a passion for learning and have a level of understanding about the role.

GSK – Ensure you adequately prepare for the interview as it can be a challenge process. Be optimistic but don't wait for that one reply carry on applying and always ask when you should hear back.

Nissan – Understand/know the content on your CV, don't be over-technical in your answers so that you miss out on any key points.

Reading List

1. How to Pass Advanced Numeracy Tests: Improve Your Scores in Numerical Reasoning and Data Interpretation Psychometric Tests, Mike Bryon (e-book)
2. How to Succeed at an Assessment Centre: Essential Preparation for Psychometric Tests Group and Role-play Exercises Panel Interviews and Presentations, Harry Tolley, Robert Wood

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