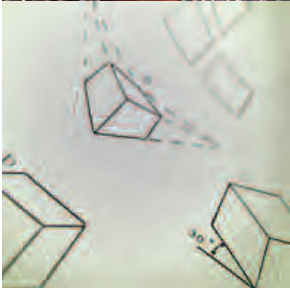


PSEG career guide



EMPLOYMENT OPPORTUNITIES



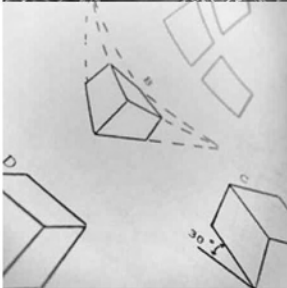
We make things work for your career.



PSEG career guide



EMPLOYMENT OPPORTUNITIES



We make things work for your career.





contents

Resume Writing	1
Resume Guidelines	2
Fact Sheet and Test Taking Tips	6
CAST Test and Gas Battery Test Sample Questions*	8
Graphic Math	8
Spatial Relations	15
Mechanical	16
Arithmetic Reasoning	19
Reading Speed & Comprehension	22
Other Study Guides for CAST and Gas Battery Test	32
Sample Test Questions for Meter Reader Test*	33
Engineering Technician Test Sample Questions	34
POSS/MASS Test Sample Questions	36
Typical Entry Level Positions for Skilled or Craft Workers	
Job Duties of Division Mechanic Assistant	38
Job Duties of Utility Mechanic Apprentice	41
Job Duties of Appliance Service Apprentice	43
Job Duties of Customer Service Representative	44
Information About Customer Service Positions	46
Answers	47
Interviewing Tips	49

This revised career guide was put together by the Workforce Diversity Management team at PSEG, with support from the HR Testing and Assessment staff to aid employees and non-employees in gaining entry into our frequently filled entry-level positions. We hope you find it to be a useful tool.

** Content of sample questions are for study purposes only and it should not be construed that these are the actual types of questions that will appear on your PSEG test. Studying for the test(s) using this guide does not guarantee passing our test(s).*

This career guide is not a contract. It does not contain promises of any kind nor gives any guarantees of employment. The employment relationship between the company and its employees is employment at will. Nothing in this guide changes or alters that existing employment relationship. The information contained herein may be changed or withdrawn at any time without advance notice. The company maintains the right to apply or administer its practices, policies, programs or procedures as it deems necessary.




resume best practices

To make your resume as readable as possible in PSEG's database, it is preferable that you:

- Use a 12 point font
- Use a standard font (like Times New Roman)
- No bolding
- No underlining
- No italics
- Use plain white paper
- Use 8.5 x 11 size paper
- All resumes must be submitted via PSEG's website: www.pseg.com

resume writing tips

- Proofread everything – a resume without errors is very important.
- Be sure to include volunteer and extra-curricular activities on your resume, especially if they relate to your chosen career, or if they reflect positive personality attributes. This could include activities in your community, or skills that you have demonstrated in your neighborhood or at home (i.e., repairing your neighbor's heater, installing a dishwasher).
- Try to limit your resume to one page. Keep it short and to the point.
- Only include an objective if you are very focused in your job search. You might consider using a Summary of Skills or Summary of Qualifications to really highlight your skills.
- Include all pertinent information on your resume. For instance, if you drive a tractor-trailer for a living, rather than just talking about your truck driving, make sure you mention that you have a CDL (commercial driver's license).



RESUME GUIDELINES

This guide was created to assist candidates in exploring aspects of their work/life experiences that can be translated to specific skills and knowledge that may be of interest to employers. Ask yourself the following questions when preparing a resume:

Communications /Customer Service Skills

- Have you ever handled customer inquiries over the phone or face-to-face?
- Have you ever analyzed, re-directed and/or solved these inquiries?
- Have you ever used a switchboard?
- Do you have strong keyboarding skills?
- Have you had experience with answering calls and navigating through a computer application to address the call?
- Have you had experience speaking to a group? For example: a company meeting/forum, community or social meeting/forum, faith-based meeting/forum, school presentations?
- Do you have good writing skills?

Organizational/ Management Skills


- Do you oversee/check other associates'/contractors' work?
- Do you have anyone working under you? (e.g., an assistant)
- Do you have project management skills?

Technical Skills

- What sophisticated equipment/tools do you know how to use? (e.g. volt meter, special gauges, fork-lift, crane, certain power tools, any testing equipment in general) What are they?
- Do you have experience in computer applications? What are they?

Team player/Leadership skills

- Are there a lot of interactions in the type of work you do?
- Have you been in charge of committees or team projects?
- Have you ever organized a function or activity at work? In the community? In a faith-based organization? Recreation center? etc.



Certifications/Licenses/ Seminars / Workshops

- Mention the name and location of the course/program or seminar. Briefly describe what you learned or what license or certification resulted. (e.g., safety/OSHA, welding, computer applications/programming, boiler seals, conflict management, leadership development, etc.)

Memberships/Awards/Accomplishments

- Mention business, social, educational, faith-based, or community organizations activity.
- What honors/awards have you received (e.g., volunteer work, community work, winning/finishing a marathon, etc.) If not self-explanatory, briefly describe the achievement.

Categorize and combine as you see fit to personalize your resume. Your skills and experience do not have to come only from your employment history. They can be described as “life experience.” In other words, you may have certain skills you have used when doing volunteer work, community/public work, faith-based work, neighborhood-related work, etc.

Lisa Doe
987 Main Street
Anytown, NJ 12345
(609) 555-5555
lisadoe@xxx.com

OBJECTIVE: To become an apprentice in a skilled trade.

SUMMARY OF QUALIFICATIONS: Mechanically-oriented individual, having graduated from vocational-technical school in the field of electromechanics. Also skilled in electrical wiring and plumbing, as I have assisted family and friends in these endeavors, and also in my volunteer work.

EDUCATION: Gloucester County Adult Vocational Technical School
Electromechanical Certificate – June 2002
Camden High School, 3.0 GPA – diploma, June 1999

EMPLOYMENT HISTORY:

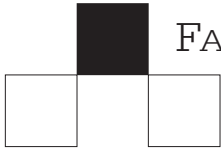
1999-present Burger King Jonestown, NJ
- Assistant Manager
- Helped manager in supervisory duties such as monitored inventory, ensured cleanliness of restaurant, proved registers
- Prepared food for customers
- Greeted customers and processed orders

1997-1999 Mowed lawns during the summer for people in my neighborhood.

OTHER ACTIVITIES AND COURSES:

Volunteer for Habitat for Humanity, helping out with the wiring and plumbing
1999-present

OSHA in the Workplace Course – Certificate of Completion 2000



FACT SHEET AND TEST TAKING TIPS

Most of PSEG's trade positions, in addition to our customer service and meter reader positions, require that candidates take (validated) pre-employment tests to enter apprenticeship training. In order to assist in this endeavor, we've compiled helpful tips to ease applicants through the process.

facts about PSEG's tests

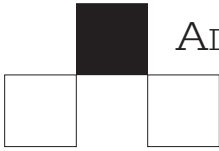
PSEG's tests, except the meter reader and customer service tests, include sections on reading comprehension, math skills, and problem solving. In general, reading comprehension and math skills are basic skills for test taking success. Try timing and challenging yourself on these skills. Seek out test preparation guides that include practice tests. Some suggestions are included in this guide or you can check with your library or the Internet for these guides.

The meter reader test focuses on speed combined with accuracy. It is necessary to identify the tables that match sets of listed numbers. Concentrate and focus on being quick and accurate. If you decide to apply, bring your confidence with you, as well as your concentration. See Page 33 for a meter reading practice test.

The customer service test, which is required for all in-office customer service positions, requires strong keyboarding skills, some basic math as well as the ability to read carefully and follow instructions. First, your speed and accuracy in entering text will be assessed. Second, your skills in entering information regarding new service and power outages will be measured. Last, your ability to answer questions on customers' bills and bill complaints will be assessed. You will be given full instructions and practice prior to each section. Practice at home by performing many consecutive tasks -- like typing a document, making a phone call, and then toggling to a spreadsheet -- then start over.

The tradespersons apprentice programs tests include sections on graphic arithmetic and mechanical concepts, in addition to reading comprehension and mathematical usage. In the graphic arithmetic section, it is necessary to look at drawings and answer questions that can be derived from the drawings, such as the distance between two points or the surface area of a rectangle. In the mechanical concepts section, there are questions that relate to physics.

The reading comprehension section requires reading a paragraph and then answering questions about what was read.



ADDITIONAL TEST TAKING TIPS AND TEST RELATED INFORMATION

The mathematics section measures an applicant's ability to work with formulas, like converting quarts to gallons. See the sample questions provided in this guide.

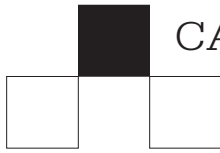
The Engineering Technician test includes sections on graphic problem solving, interpreting diagrams, mechanical concepts and reasoning from rules. See the sample questions provided in this guide.

The Plant Operator Selection System (POSS) and Power Plant Maintenance Position Selection System (MASS) tests are used to select candidates for operating and maintenance jobs in Fossil, Nuclear and Power plants. Sections of the tests include items measuring reading comprehension, mechanical concepts, mathematical usage and spatial ability. See the sample questions provided in this guide.

test-taking tips

- Get enough sleep the night before and eat before taking the test.
- Allow plenty of time to arrive to the test site early.
- If you feel nervous, try a breathing exercise to help you relax.
- Dress comfortably.
- Work as quickly and as accurately as possible. It is a good idea to skip over questions that are taking too long to answer. If you skip a question, make sure you skip the corresponding question on the answer sheet. Make sure you go back later if you have time.
- Listen carefully to the test administrator and carefully follow the instructions for the test.
- If a particular test has 'no penalty for guess,' try completing as many questions as possible as you will not receive credit for unanswered items.
- If you wear glasses for reading, make sure you bring them with you to the test.

You may find additional information on PSEG's pre-placement tests by going to www.pseg.com/careers. There is a link to PSE&G practice tests that can be used as a reference.



CAST TEST OR GAS BATTERY TEST SAMPLE QUESTIONS

graphic math



AREA a two-dimensional measurement

the area of a rectangle is found by multiplying the two dimensions, length and width.



Area units are squared length units, for example, in², mi², ft², cm², m², etc. The reason for this lies in the calculation of the area. To find the area of a 12 ft x 18 ft wall, the formula calls for the multiplication of the length times the width. The numerical part of the calculation is 12 x 8 = 96, but the unit of each dimension must also be multiplied. In this problem, the unit calculation is ft x ft = ft². When no exponent is shown on a number, variables or units are multiplied, the exponents are added, so, another way to look at the unit calculation would be:

$$\text{ft}^1 \times \text{ft}^1 = \text{ft}^{1+1} = \text{ft}^2$$

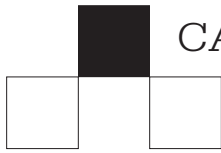
The unit calculation does not need to be done separate from the numerical calculation, the problem above was to demonstrate a point. Keep this in mind that the units must be the same {ft x ft, in x in, etc.} before they can be multiplied together. Be sure to convert all given unlike units to like units before proceeding with the calculation.

To calculate how many square inches are in a square foot, recall that there are 12 inches in one foot, then square both sides of the equality:

$$\begin{aligned} (1 \text{ ft})^2 &= (12 \text{ in})^2 \\ (1 \text{ ft})(1 \text{ ft}) &= (12 \text{ in})(12 \text{ in}) \\ 1 \text{ ft}^2 &= 144 \text{ in}^2 \end{aligned}$$

To calculate the number of square feet in a square yard, recall that there 3 feet in one yard. Now square both sides of the equality:

$$\begin{aligned} (1 \text{ yd})^2 &= (3 \text{ ft})^2 \\ (1 \text{ yd})(1 \text{ yd}) &= (3 \text{ ft})(3 \text{ ft}) \\ 1 \text{ yd}^2 &= 9 \text{ ft}^2 \end{aligned}$$



CAST TEST AND GAS BATTERY TEST SAMPLE QUESTIONS

graphic math *continued*

basic area formulas

basic area examples

Square $A = s^2$



where: A = Area
s = side length



3 in

$$A = s^2$$

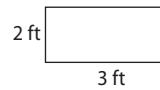
$$A = (3 \text{ in})^2$$

$$A = 9 \text{ in}^2$$

Rectangle $A = lw$



where: A = Area
l = length
w = width



2 ft

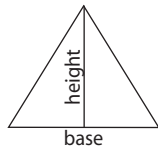
3 ft

$$A = lw$$

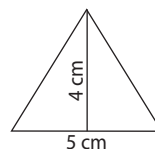
$$A = (3 \text{ ft})(2 \text{ ft})$$

$$A = 6 \text{ ft}^2$$

Triangle $A = 1/2 bh$



where: A = Area
b = base length
h = height



4 cm

5 cm

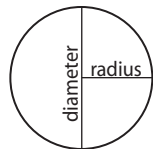
$$A = 1/2 bh$$

$$A = 1/2 (5 \text{ cm})(4 \text{ cm})$$

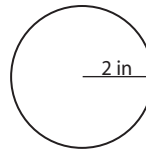
$$A = 1/2 (20 \text{ cm}^2)$$

$$A = 10 \text{ cm}^2$$

Circle $A = \pi r^2$



where: A = Area
 $\pi = 3.14$
r = radius



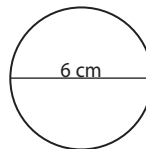
2 in

$$A = \pi r^2$$

$$A = (3.14)(2 \text{ in})^2$$

$$A = (3.14)(4 \text{ in}^2)$$

$$A = 12.56 \text{ in}^2$$



6 cm

and: $r = \frac{d}{2}$

$$r = \frac{d}{2}$$

$$r = \frac{6 \text{ cm}}{2}$$

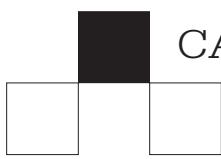
$$r = 3 \text{ cm}$$

$$A = \pi r^2$$

$$A = (3.14)(3 \text{ cm})^2$$

$$A = (3.14)(9 \text{ cm}^2)$$

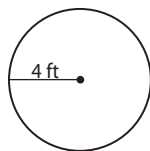
$$A = 28.26 \text{ cm}^2$$



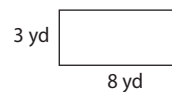
exercise 1

Find the area of the following:

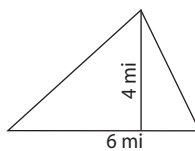
[1]



[2]

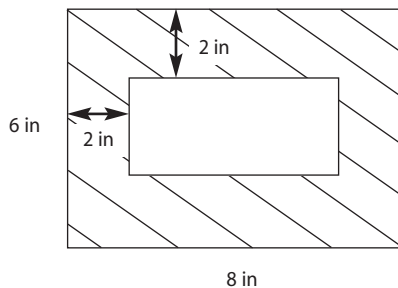


[3]

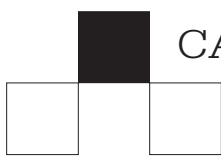


[4] Find the area of the rectangle which is 8' x 5'.

[5] Find the cross-sectional area of the shaded object.



[6] The 4 walls of a room each measure 10 ft x 8 ft. A 4 ft x 5 ft window is located on one wall. A gallon of paint covers 1,200 square feet. Not including floors or ceilings, how many rooms, with these dimensions, can a gallon of paint cover?



CAST TEST AND GAS BATTERY TEST SAMPLE QUESTIONS

graphic math *continued*

[see answers on page 47]



PERIMETER

a measure of the distance around a square, rectangular or triangular object

CIRCUMFERENCE

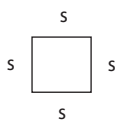
a measure of the distance around a circular object

perimeter and circumference are measured in distance units such as: feet, inches, meters, miles, kilometers, etc...

formulas

examples

Square $P = 4s$



where: $P =$ Perimeter
 $s =$ side length



65 ft

$$P = 4s$$
$$P = 4(65 \text{ ft})$$
$$P = 260 \text{ ft}$$

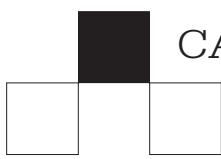
Rectangle $P = 2L + 2w$



where: $P =$ Perimeter
 $L =$ length
 $w =$ width



$$P = 2L + 2w$$
$$P = 2(8 \text{ yd}) + 2(4 \text{ yd})$$
$$P = 16 \text{ yd} + 8 \text{ yd}$$
$$P = 24 \text{ yd}$$



CAST TEST AND GAS BATTERY TEST SAMPLE QUESTIONS

graphic math *continued*

[see answers on page 47]

formulas

examples

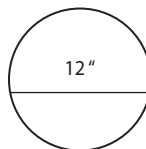
Circle $C = 2\pi r$

where: $C =$ Circumference
 $\pi = 3.14$
 $r =$ radius

or:

$$C = \pi d$$

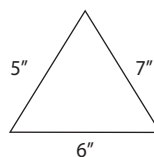
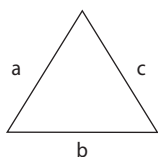
where: $C =$ Circumference
 $\pi = 3.14$
 $d =$ diameter



$$C = \pi d$$
$$C = 3.14 (12")$$
$$C = 37.68"$$

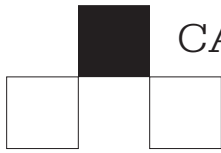
n o t e : the distance around a circle is called a circumference

Triangle $P = a + b + c$



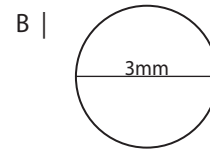
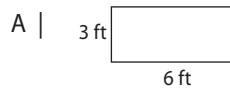
where: $P =$ Perimeter
 $a =$ length of side a
 $b =$ length of side b
 $c =$ length of side c

$$P = a + b + c$$
$$P = 5 \text{ in} + 6 \text{ in} + 7 \text{ in}$$
$$P = 18 \text{ in}$$

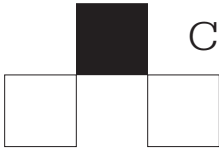


exercise 2

- [1] Find the perimeter of the following:

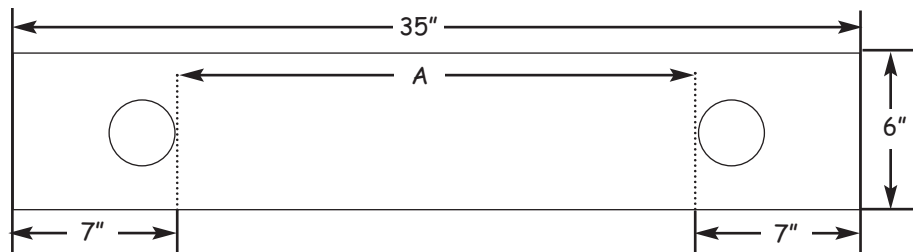


- [2] Calculate how much edging will be needed for a circular pool with a radius of 8 feet.
- [3] A rectangle yard is to be fenced with two kinds of fencing. The lengths will have heavy-duty fence, costing \$4.00 a foot. The widths will have standard fencing at \$2.00 a foot. If the yard measures 40 ft x 24 ft, what is the total cost of the fencing?
- [4] A square and a rectangle have the same perimeter. The length of the rectangle is 6 cm more than the width. If each side of the square is 12 cm, find the length of the sides of the rectangle.



exercise 3 - surface area

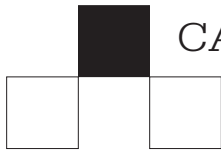
Use the drawing shown below to answer the questions below. (Please note that the dimensions shown on the drawing are not necessarily drawn to scale.)



- [1] What is the distance "A" between the sides of the two holes?
 - A | 14"
 - B | 6"
 - C | 11"
 - D | 21"
 - E | None of the above

- [2] What was the surface area of the side shown in the drawing before the holes were drilled?
 - A | 210 square inches
 - B | 245 square inches
 - C | 180 square inches
 - D | 42 square inches
 - E | None of the above

- [3] What is the surface area of the left and right sides of the diagram added together, excluding the area where A is, and before the holes were drilled?
 - A | 14 square inches
 - B | 84 square inches
 - C | 48 square inches
 - D | 42 square inches
 - E | None of the above



CAST TEST AND GAS BATTERY TEST SAMPLE QUESTIONS

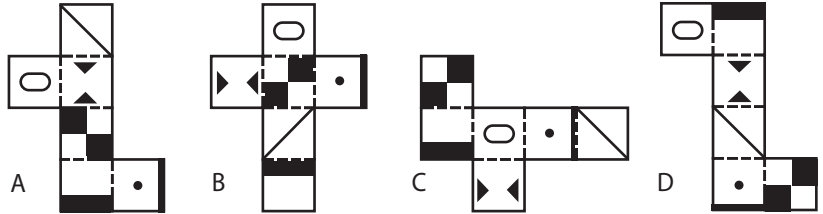
spatial relations

[see answers on page 47]

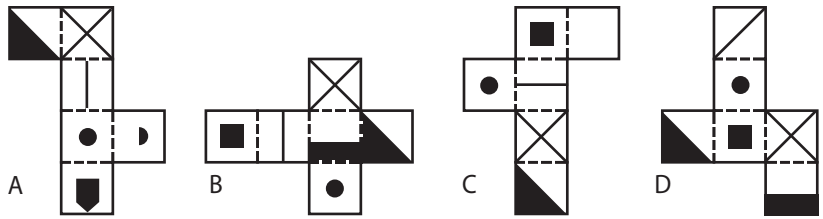
cube unfolding



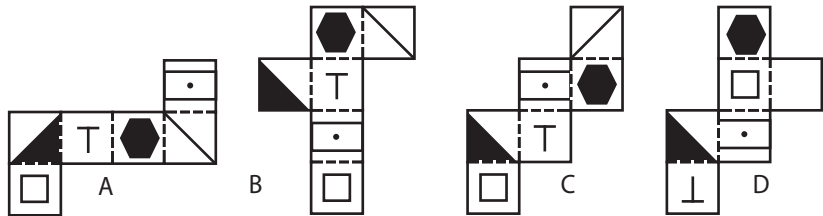
1



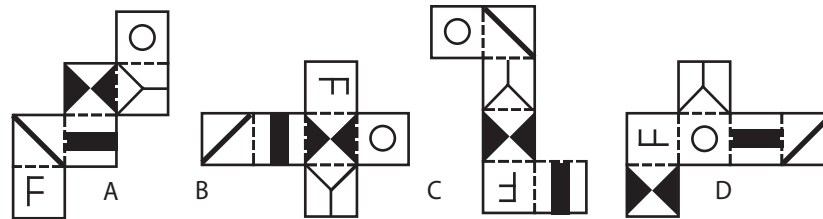
2



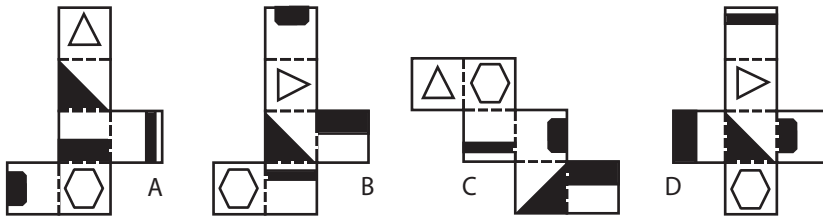
3



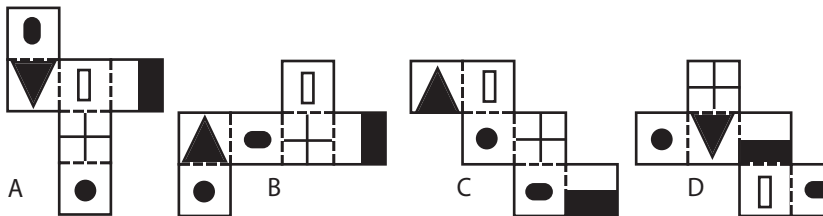
4



5



6





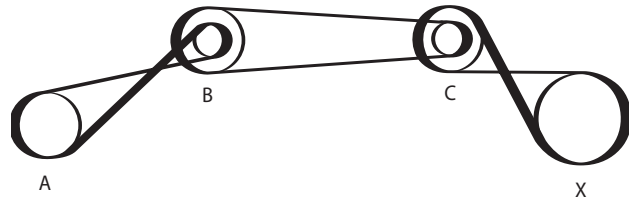
CAST TEST AND GAS BATTERY TEST SAMPLE QUESTIONS

mechanical

[see answers on page 47]

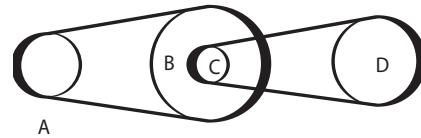
[1] Which direction will pulley X be going?

- A | Same as B
- B | Same as C
- C | Same as A
- D | Same as B and C



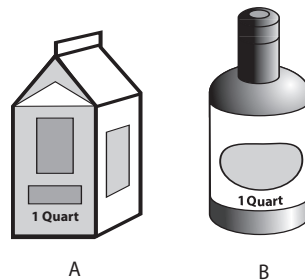
[2] Which pulley will turn fastest?

- A | Pulley A
- B | Pulley B
- C | Pulley C
- D | Pulley D



[3] Which holds more?

- A | Container A
- B | Container A
- C | Equal



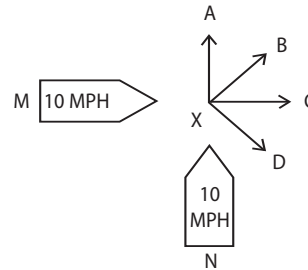
CAST TEST AND GAS BATTERY TEST SAMPLE QUESTIONS

mechanical *continued*

[see answers on page 47]

[4] In which direction will boat M go if the two boats collide at point X?

- A | A
- B | B
- C | C
- D | D



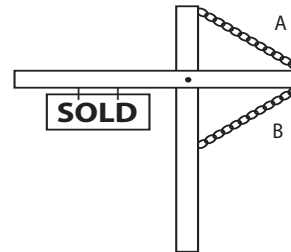
[5] Which ramp will be harder to roll the object up?

- A | Ramp A
- B | Ramp B
- C | Equal



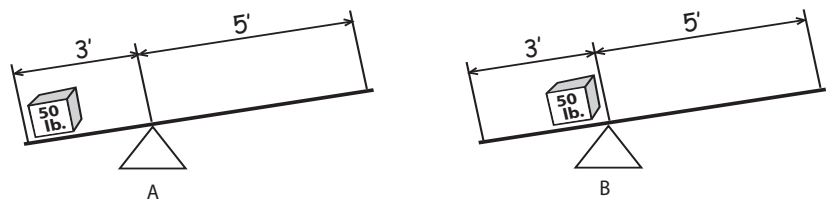
[6] Which chain will hold the sign?

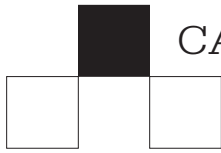
- A | A
- B | B
- C | Both
- D | Neither



[7] Which will require less effort to lift the load?

- A | Lever A
- B | Lever B
- C | Equal



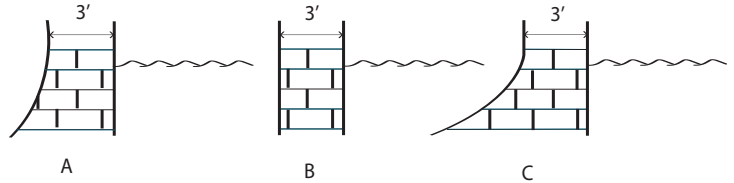


CAST TEST AND GAS BATTERY TEST SAMPLE QUESTIONS

mechanical *continued*

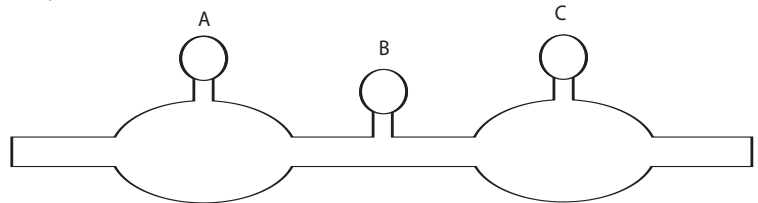
[8] Which design is the weakest?

- A | A
- B | B
- C | C
- D | Equal



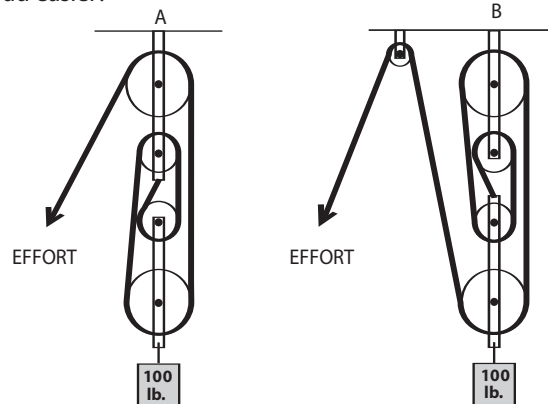
[9] Which gauge will read the highest pressure?

- A | A
- B | B
- C | C
- D | Equal



[10] Which pulley system will lift the load easier?

- A | A
- B | B
- C | Equal





CAST TEST AND GAS BATTERY TEST SAMPLE QUESTIONS

arithmetic reasoning

[see answers on page 47]

[1] A man purchased new jeans for \$24.99, but decided to take them back the next day and purchased two flannel shirts on sale for \$16.99 each. How much more money will he have to give the sales clerk to pay for the 2 shirts (assuming there's no tax on the items).

- A | \$9.99
- B | \$8.99
- C | \$8.00
- D | \$7.00
- E | None of the above

[2] At the rate of 75 words per minute, how long will it take a typist to type a 3,000-word document?

- A | 150 minutes
- B | 200 minutes
- C | 60 minutes
- D | 40 minutes
- E | None of the above

[3] A woman at a flea market sold \$225 worth of goods at a 40% profit. How much was her profit?

- A | \$225
- B | \$450
- C | \$80
- D | \$112.50
- E | None of the above



CAST TEST AND GAS BATTERY TEST SAMPLE QUESTIONS

arithmetic reasoning *continued*

- [4] A man takes out a \$100,000 life insurance policy at an annual rate of \$2.15 per \$1,000 worth of coverage. What is the annual premium?
- A | \$215
 - B | \$100
 - C | \$251
 - D | \$115
 - E | None of the above
- [5] A horse traveled 5 miles in 40 minutes. If it had continued for an hour, how many miles would it have gone, if continuing at the same rate?
- A | 8
 - B | 10.5
 - C | 7.5
 - D | 9.0
 - E | None of the above
- [6] Jimmy washed 10 cars for \$5.50 each and 8 cars for \$6.50 each. How much altogether did he earn washing cars?
- A | \$97
 - B | \$107
 - C | \$98
 - D | \$117
 - E | None of the above
- [7] On a map, where the scale is 1 inch equals 8 miles, what is the distance when a road measures $6\frac{1}{2}$ inches.
- A | 48 miles
 - B | 40 miles
 - C | 54 miles
 - D | 52 miles
 - E | None of the above



CAST TEST AND GAS BATTERY TEST SAMPLE QUESTIONS

arithmetic reasoning *continued*

- [8] If a boy rides his tricycle at the rate of 3 miles an hour, how many hours will it be until he rides 22 miles.
- A | 10 hours
 - B | 7 hours, 20 minutes
 - C | 7 hours, 15 minutes
 - D | $9\frac{1}{2}$ hours
 - E | None of the above
- [9] An employee earns \$388.80 in a week's time before deductions. What is his pay after deductions if they are as follows: Federal income tax, \$72.88; FICA, \$72.22; NJ state tax, \$9.78; retirement plan, \$31.10?
- A | \$202.82
 - B | \$233.92
 - C | \$212.60
 - D | \$192.82
 - E | None of the above
- [10] What is next number in the following series: $12\frac{1}{3}$, $17\frac{2}{3}$, 23, $28\frac{1}{3}$, _____?
- A | $33\frac{1}{3}$
 - B | $34\frac{1}{3}$
 - C | $34\frac{2}{3}$
 - D | 33
 - E | None of the above



CAST TEST AND GAS BATTERY TEST TIPS AND SUGGESTIONS

increase your reading speed and comprehension

tips to help increase your reading rate

Increasing your reading speed and comprehension will take dedication and practice. Your present habits are the result of your past learning experiences. Those habits have become established over time and will be hard to change, but with practice, you can do it. Bad habits slow down your reading speed and lower your comprehension of the material. Pick out your problem area from the list below, then apply the habit-breaking tips that are given.

Increase your reading speed by eliminating these typical habits:

- [1] **Reading out loud, moving your lips, or mentally vocalizing each word.** To help break this habit, place your index finger tightly over your lips as you read.
- [2] **Reading everything at the same monotonous pace.** You read for different reasons, and your reading rate should correspond to what you want to gain from the reading material. The purpose should determine how you read. Learn to adjust your reading rate to the type of material and the reason for reading it.
- [3] **Stopping at unfamiliar words.** Each time you stop reading, you break the rhythm and lose the idea being presented in that sentence. In most cases, you can infer the word meaning from the context in which it is used. Do not stop to look up a word in a dictionary. Wait until you have finished reading, then look up all of the words that gave you trouble. Now, reread the sentences using the new words. Try the new words several times in conversation. Never feel "dumb" because you do not know the meaning of a word. People are not born with this knowledge. Each word has to be learned. Learn a new word everyday and practice using those new words in writing or speaking.
- [4] **Moving your head from side to side to follow the sentence as you read.** Let your eyes follow the sentence, not your head. Your neck muscles cannot keep pace with your mental comprehension ability. Sore muscles and fatigue will make reading an uncomfortable chore. Try holding your head still with your hands, rest your elbows on the table, and force your eyes to move along the page.



CAST TEST AND GAS BATTERY TEST TIPS AND SUGGESTIONS

increase your reading speed and comprehension *continued*

- [5] **Daydreaming.** After reading several paragraphs or pages, do you find that you do not remember what you have just read? You need to improve your comprehension. Eliminate distractions. Do not sit in front of a window as you read. Clear your mind and think only of the words in front of you.

- [6] **Do you feel overwhelmed by the amount of information contained in your reading assignments?** When studying for a test, do you try to memorize everything, feel like you are always studying wrong things, or just do not study at all because you do not know what to study? Good students have learned what clues to look for. Generally, these things point to ideas that you should learn about: titles, headings, bold print and italicized words. Always read the introductory paragraph (usually the first paragraph of an article). Also read the lead-in sentence of each of the subsequent paragraphs. Learn how to scan a paragraph and zero in on the main idea.

tips to help increase your reading comprehension

- [1] **Set aside some time each day for reading.** Make reading a daily habit. Read the newspaper, or subscribe to a magazine devoted to your favorite hobby. Daily reading will improve your speed and it will also expand your knowledge of things in general. As you increase your knowledge, you will also be able to better comprehend other reading materials.

- [2] **Make questions out of headings, titles, bold and italicized words.** Predict the answers to those questions and read to find the answers.

- [3] **Visualize as you read.** Picture in your mind's eye what the author is saying.

- [4] **Explain what you have read about to someone else.** Verbalizing helps your understanding of the material and improves your recall ability.



timed reading drill

Allow yourself 6 minutes as you read the following article and answer the corresponding questions. If you do not complete the assignment in the time allowed, review the helpful hints given earlier and apply them to your everyday reading.

Where Does Electricity Come From?

Some of you may smartly reply, "Electricity comes from the outlet in the wall." If only it was that simple! Let us dig deeper into the making of the electrical power that we take for granted everyday.

Electricity is a property of atoms, so to understand where electricity comes from, you will need a general knowledge of atoms.

Atoms are the building block of all matter. Everything from the book you are reading to the air you are breathing is made up of millions of tiny atoms. Atoms contain electrically charged particles. The structure of an atom is comparable to our solar system with a large central core, tiny orbiting particles and a lot of space in between. The center of an atom is called the nucleus. The nucleus contains two types of particles: neutrons which have no electrical charge, and protons which have one unit of positive or plus (+) charge each. Orbiting the nucleus are the electrons which are much smaller in size than the neutrons and protons. Electrons have one unit of negative or minus (-) charge in strength. When placed in an atom in equal numbers, protons and electrons cancel each other's effect to give the atom an overall zero charge. All matter that you can touch without getting an electrical shock is made up of atoms with equivalent numbers of proton and electrons. Atoms, however, can lose or gain electrons which offsets the electrical balance of charges. Material made up of charged atoms is said to have electrical potential. An atom which picks up electrons has a negative electrical charge due to the fact that it contains more electrons than protons.

There are three ways to make an atom lose electrons and, thus, gain an electrical charge: friction, chemical action, and the use of magnets and wire, and these are the methods used to generate power.

Static Electricity is produced by friction. As two materials rub together, electrons are rubbed off of the surface of one material and are picked up by the surface atoms of the other material. For example, electrons are rubbed off from nylon or wool carpet as you walk across it. The carpet loses electrons, so it takes on a positive charge, and you can pick up the electrons so your skin takes on a negative charge.



CAST TEST AND GAS BATTERY TEST TIPS AND SUGGESTIONS

increase your reading speed and comprehension *continued*



You hold that charge (static) until it can be released by touching an object. The sudden release of charge is the static shock. Lighting is a form of static electricity. The friction is generated between rain clouds moving rapidly in the atmosphere. The lighting bolt is the immense release of static electricity.

Dry cells and lead storage batteries use chemical action to produce large numbers of free electrons at the negative (-) pole.

When the negative pole is connected to the positive terminal via a conductor, electric current flows, due to the attraction of unlike charges and the electromotive force from the source.

Motors, meters, generators, transformers and electromagnets all depend on the relation of magnetism and electrical current to generate massive electrical power. The electricity in your home is probably generated by the use of a magnetic core surrounded by a coil of wire.

reading comprehension | part 1 - multiple choice questions

- [1] What are the 3 types of particles found in atoms?
- A | Orbits, core and charges
 - B | Protons, nucleus and electrons
 - C | Matter, space and nucleus
 - D | Protons, neutrons and electrons
 - E | None of the above
- [2] A proton has a single unit of _____ charge and an electron has a single unit of _____ charge.
- A | Neutral, positive
 - B | Negative, positive
 - C | Positive, negative
 - D | Negative, neutral
 - E | None of the above
- [3] Lightning is a form of _____ electricity.
- A | Chemical
 - B | Solar
 - C | Atomic
 - D | Magnetic
 - E | None of the above
- [4] Batteries generate electricity from
- A | Chemical action
 - B | Friction
 - C | Magnets and wires
 - D | Transformers
 - E | All of the above

CAST TEST AND GAS BATTERY TEST SAMPLE QUESTIONS

reading comprehension | part 1 *continued*

[see answers on page 47]

[5] By which 3 methods are electrons separated from their atoms in the making of electricity?

- A | Chemical, nuclear and atomic.
- B | Solar, magnetic and lightning.
- C | Water, power, lighting and nuclear.
- D | Friction, chemical, and magnets and wires.
- E | All of the above

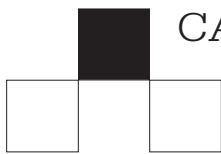
CAST TEST AND GAS BATTERY TEST SAMPLE QUESTIONS

word meanings from context

[see answers on page 47]

Use the context to help you choose the best meaning or synonym for each underlined word.

- [1] Your plan looks good. I hope it will really work. It's time to implement it and see if it's as brilliant as you claim.
- A | instrument
 - B | take apart
 - C | change
 - D | carry out
- [2] If your plan fails, we'll have to find someone who can devise a better one.
- A | design
 - B | dislike
 - C | appliance
 - D | to use peanut butter as toothpaste
- [3] Of course, I'm not saying that your plan is no good. I tend to be optimistic, so I won't be surprised when you succeed.
- A | expecting the best to happen
 - B | needing glasses to see
 - C | full of gas
 - D | unselfish
- [4] When your plan brings us great wealth, you will be rewarded for your sagacity.
- A | good looks
 - B | mistakes
 - C | intelligence
 - D | huge appetite for herbs



CAST TEST AND GAS BATTERY TEST SAMPLE QUESTIONS

word meanings from context *continued*

[see answers on page 47]



- [5] No matter what happens, I assure you that I will not forget how hard you have worked on this project.
- A | dare
 - B | promise
 - C | act like a donkey
 - D | forget



sample questions

Question 1: NARRATIVE

Read the statement or passage and then choose the best answer to the question. Answer the question on the basis of what is stated or implied in the statement or passage.

There are two types of pottery that I do. There is production pottery—mugs, tableware, the kinds of things that sell easily. These pay for my time to do the other work, which is more creative and satisfies my needs as an artist.

The author of the passage implies that:

- A | artists have a tendency to waste valuable time
- B | creativity and mass-production are incompatible
- C | most people do not appreciate good art
- D | pottery is not produced by creative artists

Question 2: SENTENCE RELATIONSHIPS

Two bold sentences are followed by a question or statement about them. Read the pair of sentences and then choose the best answer to the question.

The Midwest is experiencing its worst drought in fifteen years.
Corn and soybean prices are expected to be very high this year.

What does the second sentence do?

- A | It restates the idea found in the first.
- B | It states an effect.
- C | It gives an example.
- D | It analyzes the statement made in the first.

sample questions

Question 1: SENTENCE CORRECTION

Select the best version of the bold part of the sentence. The first choice is the same as the original sentence. If you think the original sentence is best, choose the first answer.

Ms. Rose **planning** to teach a course in biology next summer.

- A | planning
- B | are planning
- C | with a plan
- D | plans

Question 2: SENTENCE CORRECTION

The baby was obviously getting too **hot, then Sam did** what he could to cool her.

What does the second sentence do?

- A | hot, then Sam did
- B | hot, Sam did
- C | hot; Sam, therefore, did
- D | hot; Sam, trying to do

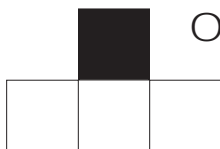
Question 3: CONSTRUCTION SHIFT

Rewrite the sentence in your head, following the directions given below. Keep in mind that your new sentence should be well written and should have essentially the same meaning as the sentence given you.

Being a female jockey, she was often interviewed.

Rewrite, beginning with **She was often interviewed...** The next words will be

- A | on account of she was
- B | by her being
- C | because she was
- D | being as she was



OTHER STUDY GUIDES

- [1] For a complete study guide to prepare for PSEG's CAST and/or Gas Battery Tests, please see *Pre-Apprentice "Basic Skills" Training*, Jack Martin and Mary Serich, Jack Martin & Associates, 1997. This is a workbook designed to prepare apprenticeship applicants to successfully compete for entry into most apprenticeship programs. Visit their web site at www.pre-apprenticetraining.com to find bookstores that carry the publication, or you can order it online.
- [2] Ten Reading Comprehension Activities
<http://www.tengrrl.com/tens/index.shtml>
This site focuses on different activities you can do to increase your reading comprehension skills.
- [3] 1001 Math Problems
Learning Express. Garden Grove, CA : Learning Express, 1999. 214 p. The proven way to sharpen your math skills fast. This book covers every major math area - the basics, fractions, decimals, percentages, basic geometry, elementary algebra. Complete answer key with explanations. Multiple choice format, like you find on most standard tests.
- [4] ARCO Mechanical aptitude and spatial relations tests
Levy, Joan U. New York : Macmillan Publishing Company, 1999. 277 p. The only guide to the tests required for certain union apprenticeship programs and for specialized positions in private industry, the civil service, and the military, this popular reference is packed with examples, drills, and exercises, and offers intensive practice with the unique question types that appear only on mechanical aptitude and spatial relations tests. Hundreds of practice questions just like the ones on real exams. Detailed diagrams to explain every answer. Test-taking tips and strategies.
- [5] What you need to know about developing your test-taking skills, reading comprehension
Boone, Robert S. Chicago : NTC Contemporary Publishing Group, 1996. 92 p. Designed to help you improve your understanding of everything you read, especially the types of reading selections that you will find on standardized tests. After learning the three key steps to strategic reading, you will have the opportunity to read dozens of selections in the humanities, social studies, and sciences and answer typical test questions about them. Completing these exercises can make you not only a better reader, but also a much more confident test-taker.

METER READING TEST PRACTICE ITEMS

coding speed

[see answers on page 48]

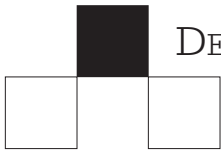
Practice how many you can match as quickly as possible. Using the following table, find the number in columns A-E that matches the word in the first column.

truck	9877	wires	4219	pipes	1905	pole	2283	tree	1321
office	4678	desk	7631	chair	3432	book	1006	phone	5709

	A	B	C	D	E
1. phone	1006	5709	1321	7631	2283
2. pipes	4678	9877	7631	1905	5709
3. office	7631	1321	4678	1006	1905
4. truck	9877	4219	1905	5709	1321
5. pole	1006	1321	2283	4219	4678
6. phone	4219	3432	5709	7631	1905
7. chair	1321	4219	1905	3432	5709
8. tree	2283	1006	7631	1321	4219
9. desk	4678	3432	1006	5709	7631
10. wires	9877	4219	2283	1905	4219
11. book	3432	7631	1006	5709	2283
12. truck	4219	1905	2283	9877	4678

cats	2933	dogs	1173	planes	9001	trains	9324	birds	1416
snakes	3507	lions	8685	earth	6248	moon	4621	rabbits	2432

	A	B	C	D	E
13. trains	9001	9324	1416	1173	3507
14. earth	2432	3507	2933	9001	6248
15. lions	8685	6248	3507	1416	1173
16. snakes	3507	2933	9001	1173	6248
17. birds	6248	1416	8685	9324	1173
18. cats	4621	1416	2933	3507	6248
19. planes	9324	2432	3507	9001	1173
20. earth	4621	8685	9001	2933	6248
21. dogs	9001	1173	4621	6248	3507
22. rabbits	1416	9001	2432	3507	2933
23. trains	9324	3507	8685	9001	6248
24. moon	2432	1173	4621	2933	1416



DESCRIPTION OF THE TEST

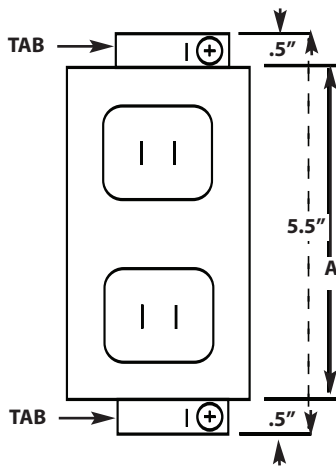
engineering technician test sample questions

[see answers on page 48]

graphic problem solving

Graphic Problem Solving measures the ability to use numerical information presented in illustrations to solve practical arithmetic problems. An example of this is shown below:

Choose the option that correctly answers the problem and blacken in your answer in the "EXAMPLE" box on your sheet.

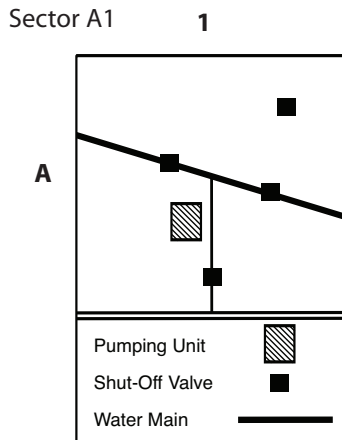


[1] If the height of each box tab is .5", what is the height (A) of the electrical outlet?

- A | 3.5"
- B | 4.5"
- C | 5.0"
- D | 6.5"

Interpreting Diagrams measures the ability to use symbols and codes to locate objects on a map or diagram and to determine the object's status. An example of Interpreting Diagrams is:

Choose the option that correctly answers the problem and blacken in your answer in the "EXAMPLE" box on your sheet.

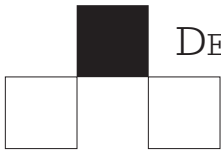


[1] How many pumping units are located in sector A?

- A | 1
- B | 3
- C | 4
- D | 5

[1] How many shut-off valves are located on water mains?

- A | 0
- B | 1
- C | 3
- D | 4

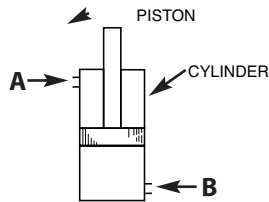


DESCRIPTION OF THE TESTS

engineering technician test sample questions *continued*

[see answers on page 48]

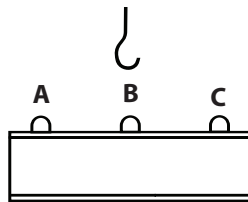
Mechanical Concepts measures the ability to apply mechanical concepts in solving practical problems. An example is:



[X] At which point should pressurized air enter the cylinder to the lower position? (If both, mark C).

The correct answer is A, so you would darken the circle marker A for Example X on your answer sheet.

Now look at Example Y.



[Y] To keep the beam horizontal when lifted, at which point should you hook the cable? (If both, mark C).

Reasoning from Rules measures the ability to read and apply rules to make decisions and to troubleshoot a logic network. An example follows:

Read the situation below:

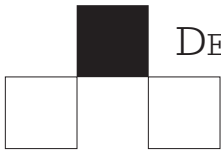
You oversee four machines. They are scheduled according to the following rules:

- [1] If the product is Grade A and costs over \$5,000:
 - schedule Machine 1 if the order is from Region W.
 - schedule Machine 2 if the order is from Region x.
- [2] If the product is Grade B:
 - schedule Machine 3 if the order is to be coiled
 - schedule Machine 4 if the order is to be stacked.

Now use the information provided above to answer the example question below. Choose the option that correctly answers the problem and blacken in your answer in the "EXAMPLE" box on your sheet.

Example A: If the product is Grade B and is to be coiled, you should schedule:

- A | Machine 1
- B | Machine 2
- C | Machine 3
- D | Machine 4



DESCRIPTION OF THE TESTS

POSS/MASS test sample questions

[see answers on page 48]

aptitude tests

The aptitude tests measure the mental abilities found to be important to successful job performance for plant operators. The aptitude tests are arranged in three alternate batteries which differ slightly in the time required for administration.

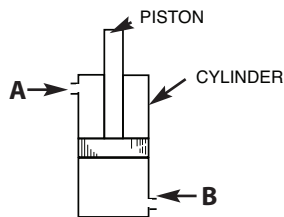
Although the content of the aptitude batteries differs somewhat, each battery has been found to be related to success in plant operations work. Aptitude Battery C, which is most widely used, is comprised of the following tests:

Reading Comprehension. This test measures a person's ability to read and understand the type of material found in power plant operator training manuals. The Reading Comprehension test consists of five reading passages, each followed by several multiple choice questions about the passage. The test has 36 items and a 30-minute time limit.

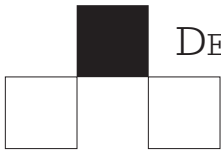
Mechanical Concepts. This test measures the ability to understand mechanical principles. There are 44 multiple choice items. Each item contains a pictorial description of a mechanical situation, a question, and three possible answers. The test has a 20-minute time limit.

Examples of the Mechanical Concepts test are:

- x) In the figure below, at which point should the pressurized air enter the cylinder to lower the piston? (If both, mark C)



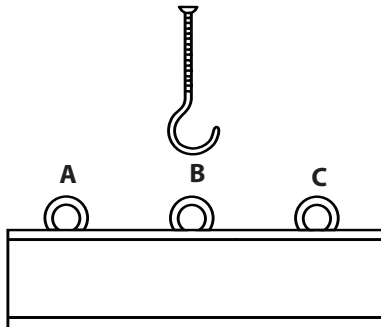
- A
- B
- C (Both A & B)



DESCRIPTION OF THE TESTS

POSS/MASS test sample questions *continued* [see answers on page 48]

y) To keep the beam horizontal when lifted, at which point should you hook the cable?

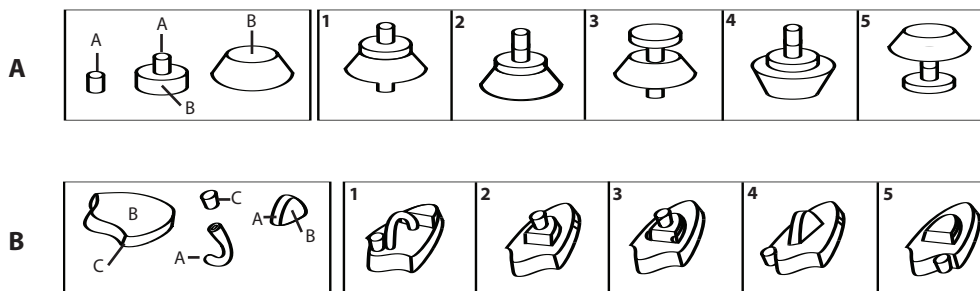


- A
- B
- C (Both A & B)

Mathematical Usage. This test measures skill in solving and manipulating mathematical relationships. There are three sections: formula conversion problems, algebra problems, and word problems. The total test contains 46 multiple choice items and has a 17-minute time limit.

Spatial Ability. This test measures the ability to visualize the proper assembled form of an object. In this test, candidates are to assemble the parts so that the places having the same letter are put together. The test contains 20 multiple choice items and has a 10-minute time limit.

Examples of the spatial ability tests are:





JOB DUTIES (FROM UNION MANUAL)

division mechanic assistant | 3338

entry-level position in PSEG's electric division

DUTIES

Performs minor work required in the construction, operation and maintenance of the underground transmission and distribution plant. Duties are:

- [1] Anticipate the needs of underground technicians and division mechanics working in manholes or on poles, assist from the ground, and supply tools equipment and material required.
- [2] Install manhole hardware, fireproof cables, and clean and paint underground equipment.
- [3] Assist in installing, rearranging or removing conduit manholes steel pole plant equipment enclosures, street light poles and posts, futures, transformers pads, cables and equipment, including aerial and submarine cables.
- [4] Clean conduits, manholes, hand holes, and excavations. Clean vaults and transformer mats in locations where the work can be done safely.
- [5] Operate and make minor field repairs and adjustment on furnaces and blow torches, and heat compounds and solder to proper temperatures.
- [6] Air-test all types of underground equipment, at the direction of an underground technician or Division Mechanic.
- [7] Operate pumps, fans, air driven tools, and other similar equipment.
A | Set up warning signs, guards or barricades around openings or work areas.
- [8] Load, unload and move equipment and material.
- [9] Keep in good order all tools, material and equipment required by underground personnel.
- [10] Operate car or light truck; keep vehicle neat and orderly.

JOB DUTIES (FROM UNION MANUAL)

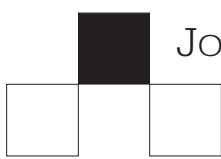
division mechanic assistant | 3338 *continued*

- [11] Perform clerical work related to this job.
- [12] Learn to apply approved methods of artificial respiration.
- [13] Perform other similar or less skilled work of the occupational group.
- [14] Mix and place concrete repair sidewalks.
- [15] Dig and backfill excavations by hand.

GENERAL REQUIREMENTS

In addition to the duties and qualifications for each job classification as set forth in the job specifications, each employee must meet the Company's general requirements, which include:

- [1] The possession of normal health, physique, and senses; and the strength, endurance, and other physical characteristics necessary for the particular job.
- [2] The willingness to follow instructions and cooperate with other employees.
- [3] The willingness to respond to calls outside of regular hours when the need arises.
- [4] The willingness in emergencies to perform, in accordance with the terms of the Agreement, any work for which he/she is qualified.
- [5] The willingness to work, in accordance with the terms of the Agreement, a shift schedule and irregular hours where the nature of the work requires it.
- [6] The willingness to direct and instruct employees assisting on the same work.
- [7] The willingness to comply with the general rules and practices of the Company, with the specific rules of the department in which employed, and with the rules of other departments with which his/her work must be coordinated.



JOB DUTIES (FROM UNION MANUAL)

division mechanic assistant | 3338 *continued*

- [8] The willingness to learn and observe the Company's safety rules applicable to the job.
- [9] The possession of a satisfactory previous record.
- [10] The possession of the characteristic of carefulness.

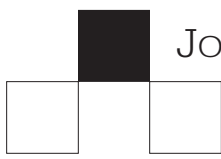
QUALIFICATIONS

Must be able to read, write, speak and understand English. Must be able to perform fundamental operations in arithmetic and take measurements. Must have mechanical aptitude. Must have a valid driver's license and be able to qualify for a basic driver's license with an articulated vehicle endorsement to operate motor vehicles in the state of New Jersey.

ESSENTIAL

Must have successfully passed the CAST pre-placement test.

Note that the resume on Page 5 is indicative of the type of person that we would be interested in testing and ultimately employing for the Division Mechanic Assistant or Utility Mechanic Apprentice on the next page. If you would like to improve your chances of getting into this position, and you don't have mechanically-related experience, you should take courses in Vo-tech. You should also try and do volunteer activities that show your interest and aptitude.



JOB DUTIES (FROM UNION MANUAL)

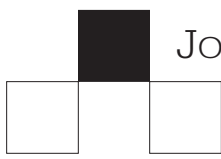
utility mechanic apprentice | 9322N

entry-level position in PSEG's gas division

DUTIES

Under direct supervision, performs manual work in the Gas Business Unit; performs duties like:

- [1] Breaking pavement, digging, backfilling, and tamping trenches or other excavations with hand or pneumatic tools;
- [2] Loading, unloading, moving, and placing pipe, fittings, tools, materials, supplies, and equipment; acting with others as a team when moving heavy items;
- [3] Assisting in shoring, bracing, and bridging excavations;
- [4] Removing water from trenches, excavations, manholes, and other working areas by hand pumps and bailing;
- [5] Drilling holes in concrete, masonry, brick, asphalt and other material with hand or pneumatic tools, patching same;
- [6] Mixing and placing concrete paving bases and asphalt-type surface materials;
- [7] Cleaning and scraping surfaces and applying protective coatings, such as, liquid tar and priming material;
- [8] Cleaning manholes, vaults, pits, drains, trenches, cleaning roofs, eaves, and sewers at the Distribution Headquarters;
- [9] Painting buildings, structures, equipment and piping;
- [10] Operating car or light truck. The decal weight of the vehicle is not to exceed 6,000 pounds.



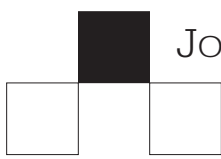
JOB DUTIES (FROM UNION MANUAL)

utility mechanic apprentice | 9322N *continued*

QUALIFICATIONS

Must meet the Company's requirements as to general qualifications (see Page 35) and, in addition:

- [1] Must be able to understand and follow simple instructions and learn simple routine procedures;
- [2] Must be able to learn the effective and safe use and the proper care of the tools, equipment and materials used in the work;
- [3] Must pass driving tests prescribed by the Company and hold an auto driver's license valid in the State of New Jersey;
- [4] Must have a working knowledge of the Motor Vehicle Traffic Laws and Regulations of New Jersey;
- [5] Must have a knowledge of and ability in the safe operation and care of vehicles in all locations and under all conditions of traffic and terrain; and
- [6] Must be able to learn the safety rules and practices required for their own and fellow workers' safety on the job.



JOB DUTIES

appliance service apprentice

POSITION DESCRIPTION

Under general supervision in the field, duties include: Install meters, service regulators, appliances and associated piping. Maintain and troubleshoot gas installations and appliances, including house heaters, air conditioners, ranges, water heaters and electric/gas dryers as qualified, through assignment, at times with the assistance of other employees. In the shop, complete other service department work. Service Apprentice will be expected to participate in the apprentice program established for the purpose of training, testing, evaluating service department personnel. Successful completion of the program will ensure an immediate promotion to Service Specialist Classification. Some proficiency needed in the use of tools and test equipment. Essential requirements include:

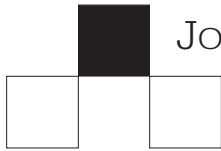
ESSENTIAL

Must successfully pass the Gas Battery pre-placement test. Have a high school diploma or equivalent and valid driver's license. This is a Safety Sensitive Position – DOT testing is required.

DESIRABLE

Graduate from a technical school or have related work experience. Have CFC certification Level II minimum. Preferred related work experience on HVAC or appliance servicing.

Note that the resume on Page 4 is one of someone that clearly has the desired qualifications for an Appliance Service Apprentice.



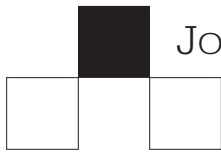
JOB DUTIES

customer service representative | F/G-367A

DUTIES

Performs Collection and Credit work in connection with the interviewing of customers concerning collection, credit problems, the collection of unpaid accounts for gas and electric service, deposits, sundry sales, and other related clerical work. Duties include such work as:

- [1] Interview customers concerning collection and credit problems including, but not limited to: discontinuance reminders and notices for delinquent energy, security deposits, and sundry sales balances, payment arrangements, shut-offs for non-payment, responsibility for charges and explaining related company policies and BPU Tariff regulations.
- [2] Complete various administrative collection activities including, but not limited to: the examination of accounts previously shut-off for non-payment, active and broken payment arrangements, security deposits, inhibited accounts and collection correspondence.
- [3] Compile and assemble data and prepare letters, concerning collection and credit problems.
- [4] Assist in collection of unpaid accounts by obtaining statements, through verification of records, by making telephone calls, etc., as directed.
- [5] Resolve routine inquires in the handling of special accounts such as municipal, relief agency, bankrupt accounts, etc., as directed.
- [6] Prepare or generate, all orders, reports, etc., necessary in connection with assigned work, such as active orders, inactive orders, investigation orders, memos, messages, transfers, etc.
- [7] Assist employees of a higher classification, under close supervision, as assigned.
- [8] Perform other similar or less skilled related work, as directed; Assist the Inquiry Centers, during designated situations.
- [9] Assist with similar work of other departments as required and assigned.



JOB DUTIES

customer service representative | F/G-367A *continued*



QUALIFICATIONS

Must meet the Company's general requirements, and in addition:

- [1] Must have a minimum of a high school education, or equivalent business experience.
- [2] Must be generally familiar with the territory served by the Company.
- [3] Must have a general knowledge of codes and of the more commonly used rates their applications.
- [4] Must have exceptional poise and tact, as indicated by the ability to handle more complex customer contacts in a pleasant and courteous manner and to explain procedures related to collection and credit activities.
- [5] Should be able to interpret simple financial statements and credit reports.
- [6] Must be neat and accurate in work, as indicated by the ability to compile data, and to prepare orders, forms and statement subject only to supervisory check.
- [7] Must be able to understand, transmit, and apply oral and written instructions.
- [8] Should have a knowledge of governmental regulations related to credit work.
- [9] Must have a general knowledge of the Customer Operations Business Unit organization, of departmental functions, and of the procedures within the department incident to assigned work.
- [10] Should have good typing skills.



INFORMATION ABOUT CUSTOMER SERVICE POSITIONS

PSEG has a large Customer Service Department, operating out of Cranford, NJ and Bordentown, NJ. Most of these positions require that the candidate take our Customer Service Test. The positions that we hire for are:

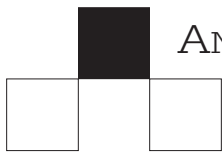
- Full-time Customer Service
- Part-time Customer Service
- Full-time Collections Representatives
- Part-time Collections Representatives
- Part-time Bookkeeping (does not require Customer Service Test)
- Meter Reading (Meter Reading Test)

The most likely positions to be hired through external sources is the part-time Collections Representative position, the part-time Bookkeeping position, Meter Reading and Customer Service.

- Collections Representative – responsible for working with customers over the phone to develop payment options. Hours vary and could be on weekends and nights.
- Bookkeepers – need to have skills in elementary bookkeeping. Hours are during the day.
- Meter readers – Part-time and full-time opportunities may be available. All require employees who like to work outdoors, have a high level of speed and accuracy in entering numbers on their handheld meter recording device, and are good with customers.

Part-time Customer Service positions are ideal for students looking to work part-time while attending class full-time, or people who just want to work part-time on a permanent basis.

See Page 6 for information about the Customer Service test.



ANSWERS



Graphic Math

Exercise 1 [pgs. 10 - 12]

1. 50.24 ft²
2. 24 yd²
3. 12 mi²
4. 40 ft²
5. 40 in²
6. 4 rooms

Exercise 2 [pg. 13]

1. (a) 18 ft
(b) 9.42 mm
2. 50.24 ft
3. \$416.00
4. $w = 9, l = 15$

Exercise 3 [pg. 14]

1. D
2. A
3. B

Spatial Relations – Cube Unfolding [pg. 15]

1. A
2. D
3. C
4. A
5. B
6. A

Mechanical [pgs. 16 - 18]

1. C
2. A
3. C
4. B
5. B
6. B
7. B
8. B
9. D
10. B

Arithmetic Reasoning [pgs. 19 - 21]

1. B
2. D
3. E
4. A
5. C
6. B
7. D
8. B
9. A
10. E

Reading Comprehension – Part 1 [pgs. 26 - 27]

1. d
2. c
3. e
4. a
5. d

Word Meanings From Context [pgs. 28 - 29]

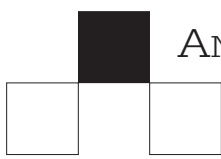
1. D
2. A
3. A
4. C
5. B

Reading Comprehension – Part 2 [pg. 30]

1. B
2. B

Sentence Skills [pg. 31]

1. D
2. C
3. C



ANSWERS *continued*

Meter Reading Test – Coding Speed [pg. 33]

1. B
2. D
3. C
4. A
5. C
6. C
7. D
8. A
9. E
10. B
11. C
12. D
13. B
14. E
15. A
16. A
17. B
18. C
19. D
20. E
21. B
21. B
22. C
23. A
24. C

Engineering Technician Test (pg. 34)

Graphic Problem Solving

You should have selected Option B. You should have looked at the distance from top to bottom of box and subtracted the height of each box tab from this distances (5.5" - .5" - .5"). Therefore the correct answer is 4.5"

Interpreting Diagrams

You should have selected option 'A' for the first example, since there is one pumping unit shown on the map. Option C is correct for the second example. There are four shut off valves pictures, but only three are located on water mains.

Mechanical Concepts

The correct answer is 'A'.

The correct answer is 'B'.

Reasoning From Rules

You should have selected option C. Since the first part of Rule 2 states that a grade B product to be coiled should be scheduled on Machine 3.

POSS/MASS Test (pg. 36)

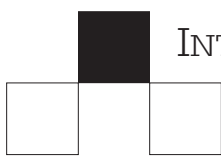
Mechanical Concepts

The correct answer is 'A'.

The correct answer is 'B'.

Mathematical Usage

The correct answer is 'C'.



INTERVIEWING TIPS

what a potential candidate should know about a job interview

The hiring process includes three major steps: The resume was the first step in introducing yourself through your education, job skills and experience. Passing an entrance test indicates an aptitude in the area you have applied for with a company. However, the interview is your chance to communicate directly to the hiring manager or hiring team your ability to contribute to the organization.

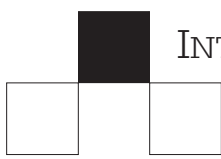
Making a good impression at your interview is made easier if you do a little research beforehand and understand something about the company and position for which you are applying. What does the company value and how are those values reflected in every day business? One valuable way to research a company is via its Web site. This can give you a sense of the overall business and how it communicates to both customers and prospective employees. Values can be found by reading statements from key leaders within the organization.

At PSEG, a program to identify best practices in desired job traits has been identified as "Winning Behaviors." It is through this lens that hiring managers and hiring teams view the questions they ask. A "STAR" method of interviewing allows the interviewer(s) to determine a person's ability to demonstrate those desired "Winning Behaviors."

What is the STAR method? STAR indicates Situation, Task, Action and Result or Results. As an example an interviewer might say, "Describe for me a time where you saw an opportunity to improve a work method or process. What was the situation, what action did you take, and what was the result?" In this case the interviewer is looking for a Situation or Task you were working on, the Actions you took and the Results of your actions.

So what are these "Winning Behaviors?" The following is a list of nine behaviors the company values in each and every employee:

- Focuses on the Customer
- Champions Change
- Learns Continuously
- Values the Diversity of People
- Applies Business Know-How
- Leads by Example
- Achieves Results
- Fosters Excellence
- Builds Partnerships



INTERVIEWING TIPS

what a potential candidate should know about a job interview

continued

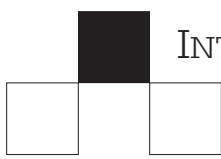
As emphasized above, interpersonal skills are exercised by focusing on the customer, valuing the diversity of people and building partnerships. These demonstrate a person's ability to function as part of a team. Applying business know-how, learning continually and fostering excellence, strongly reflects a dedication to know as much as possible about the job and how it interrelates to other job processes.

Leading by example, championing change and achieving results, designate a dedication to ownership of the work given and focusing on results. Results can be positive or negative; our ability to learn from our mistakes also shows a desire to learn continuously.

making a good impression on job interviews

What to keep in mind the day of the interview and immediately afterward:

- [1] Be on time - Being on time is interpreted by the interviewer as evidence of your commitment, dependability and professionalism and will be a must if you are hired. Allow for plenty of time to travel in the event of heavy traffic or inclement weather.
- [2] Relax and Smile - Think of the interview as a conversation, not an interrogation. Remember that the interviewer can be just as nervous about making a good impression on you.
- [3] Be positive - Show openness by leaning into a greeting with a firm handshake and smile. Show high energy and interest. Don't make negative comments about current or former employers.
- [4] Be self confident - Establish a rapport with the interviewer and make eye contact with him/her. Answer questions in a clear voice.
- [5] Remember to listen - Communication is a two-way street. If you are talking too much, you will probably miss cues concerning what the interviewer feels is important.
- [6] Think before answering difficult questions - If you are unsure how to answer a question, don't be afraid to ask for clarification, for better understanding before answering.



INTERVIEWING TIPS

what a potential candidate should know about a job interview

continued

[7] Avoid negative body language - Interviewers look to see how well you react under pressure. Do not chew gum or smoke and avoid these signs of nervousness and tension:

- Frequently touching your mouth
- Faking a cough to think about an answer to a question
- Gnawing on your lip
- Tight or forced smiles
- Swinging your foot or leg
- Folding or crossing your arms
- Slouching
- Avoiding eye contact
- Picking at invisible bits of lint

[8] End the interview with a handshake and thank the interviewer or interview team for his or their time. Reiterate your interest in the position and your qualifications. Politely ask when you can expect to hear about the results of your interview.

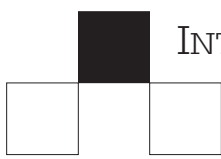
some additional tips on appearance:

For Women:

- A business suit is best - if not, dress slacks and blouse are good
- Wear sensible, polished shoes
- Be moderate with make-up, perfume and jewelry
- Hair and fingernails should be well-groomed

For Men:

- A clean, ironed shirt and conservative tie is preferable
- A simple jacket or business suit is a good idea as well
- Shoes should be polished and sensible
- Face should be clean shaven or facial hair should be neatly trimmed
- Hair and fingernails should be well-groomed
- Use cologne or after-shave sparingly and be moderate with jewelry



some commonly asked interview questions

On page 49 we discussed "What to Know About a PSEG Job Interview." In that section we briefly presented the STAR method of interviewing. The acronym STAR stands for **S**ituation, **T**ask, **A**ction, and **R**esult. In this section we will give examples of questions that are often used in an interview setting and give a more detailed example of the STAR technique in action.

Can you tell us about a time when you noticed an opportunity for improving a work procedure or process and what action did you take?

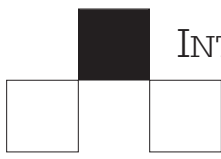
In this question you may not have had the opportunity to change something at work. It may be that you are just coming into the workforce. It is perfectly acceptable to tell the interviewer or interview team, that you have not yet had this opportunity at work, however, you have faced this circumstance in situations outside of the work environment. Remember, the question is used to ascertain the winning behaviors demonstrated. In this case the interviewer could be looking for the following:

- Did you notice a project or task that could be handled more efficiently?
- What actions did you take, within your scope of responsibility, to address the situation or task?
- What leadership and/or teamwork was demonstrated when seeking a resolution to improving the situation or task?
- How effectively did you communicate the need for the change in the situation or task?
- What was the result of your action or your team action when change was implemented? Was it successful or did it fail?
- What lessons were learned and communicated from the success or failure of the change in the situation or task?

For clarity, we will give an example of a possible response to the question posed above:

interview team Can you tell us about a time when you noticed an opportunity for improving a work procedure or process and what action did you take?

interviewee I have just started into the workforce and unfortunately have not had the opportunity to demonstrate how I would handle this situation in that environment. However, I have faced this



INTERVIEWING TIPS

what a potential candidate should know about a job interview

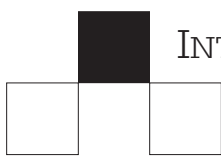
continued

situation outside of work and I am sure this relates to your question. I volunteer my time to work in the community with a local housing restoration project. The project helps to restore abandoned and vacant homes in the community and repairs them so that they can be used or purchased by those in need. The workforce in the project is mostly volunteer help. During our last project it was apparent that we had a number of people without any meaningful work to accomplish. Many people were standing around without the proper tools to work in the home. The last thing we wanted was for people to commit their time yet not be involved in the actual work. I spoke with the job foreman and asked if we could begin to organize the team members into workgroups and list the needed tools for the job ahead of time. We would assign workgroups by using a small questionnaire for our volunteers that would indicate their building talents and experience. We assigned workgroup leaders, and gave them a list of materials that would be on site, the number of people within his or her workgroup, the assigned area of work and the proper equipment to bring or that would be provided. By taking this action, we became much more effective in using the volunteer help to accomplish rebuilding the homes in a much shorter timeframe.

Let's look at the breakdown of the answer in the eyes of an interviewer. The interviewee showed an ability to understand what the interviewer was looking for, instead of the answer, "I'm sorry I haven't had the opportunity to demonstrate this in my job." The answer can be measured in the following way:

- [1] The Interviewee demonstrates a knowledge of the intent of the question and thinks quickly about a pertinent answer.
- [2] The Interviewee demonstrates Valuing People, i.e. not wanting people to waste the interviewers' time.
- [3] The Interviewee applies business know-how by bringing this to the attention of the supervisor with a game plan to improve the process
- [4] The Interviewee leads by example and fosters excellence by not simply letting the process take its own course but by looking for ways to improve the process.
- [5] The Interviewee certainly champions change by being involved in improving the process.
- [6] The Interviewee focuses on results - as seen by the outcome of the project.

The above example gives you a little insight as to how an interviewee's answers are perceived. The interviewee has given an answer that reflects well in a number of areas that the company values in its employees. By looking at the questions asked through this lens, your chances of a successful interview increase significantly.



INTERVIEWING TIPS

what a potential candidate should know about a job interview

continued

other commonly asked questions:

What are your strengths and how have you demonstrated them? Conversely, what are your weaknesses and how have you improved on them? What special skills do you have that would make you a strong candidate for the job and tell me of a time when you demonstrated those skills. Tell us of a time when you showed initiative and what was the outcome? What accomplishment or accomplishments have given you the most satisfaction? Demonstrate a time when you were part of a team, what part and what did you learn from the experience?

These are a few of the questions that can be asked. Take some time and use the STAR method and see how you would respond to these questions. As you begin to see questions through this lens you give yourself a foot up in the interview process.

be yourself and simply put your best foot forward

Your ability to relax, show self-confidence and communicate with pertinent information to each question is important during an interview. Remember the interviewer has gone through this same process and does understand the anxiety that can affect people during an interview.

An interview is a two way street. It is an opportunity to find out if you would be a good fit for the job and if you want to work for an employer. Don't hesitate to ask questions you have regarding the job. If questions are asked and you don't fully understand the question, or you would like it to be repeated, ask the interviewer to please repeat the question. It is important that you understand what is asked before responding.

The typical interview can last between 30 minutes and an hour, depending on the interviewer or interview team. After the interview, the interviewer or interview team will look at the answers that you provided to the questions and put them into a matrix format that will touch on desired, demonstrated behaviors. After all candidates are interviewed, you will be informed of the result. It is important that if you are not the successful candidate in a job interview that you use the experience to help with future job interviews.

Regardless of the outcome, use each experience to help you better prepare for your next opportunity. We hope that this information will help you in your ability to interview successfully.