Physical Test Battery (PTB)

Preparation Guide

The Physical Test Battery for Physical Jobs

OVERVIEW
Pacific Gas and Electric Company believes it is critical that physical employees have the basic ability to succeed on the job. The Physical Test Battery (PTB) allows PG&E to make an initial assessment of your problem solving and mechanical abilities. Because the PTB is standardized, it ensures that everyone who wants to be considered for our physical positions receives a fair and objective opportunity to demonstrate their abilities. This test has been professionally validated to ensure job relatedness.

The PTB consists of two components and is administered in one short session:
- **Numerical Ability**
- **Space Visualization**

NUMERICAL ABILITY
This 75-item exercise is designed to measure problem solving ability through basic mathematical questions. You must add, subtract, multiply, or divide to solve each problem and then select the correct answer from the five multiple choices provided. The exercise is divided into three sections (25 questions each). Part 1 measures proficiency in working with whole numbers. Part 2 measures proficiency with decimals. Part 3 measures proficiency with fractions. There is a ten minute time limit for the entire exercise. Sample problems for Part 1 are shown below.

> Look at the sample problems below. Each problem is followed by four possible answers and an "X." You are to work each problem and put a heavy black mark in the circle before the correct answer. If the correct answer is not given, make a heavy black mark in the circle before the "X."
>
> Now work the sample problems below. The first one has been answered correctly.
>
> | | | | | | | |
> |---|---|---|---|---|---|---|
> | 1. | 5 + 5 = | O 8 | O 11 | O 9 | O 12 | ● X |
> | 2. | 12 - 6 = | O 5 | O 7 | O 6 | O 8 | O X |
> | 3. | 5 x 5 = | O 23 | O 24 | O 25 | O 26 | O X |
> | 4. | 30 ÷ 3 = | O 6 | O 7 | O 9 | O 8 | O X |
> | 5. | 6 + 7 = | O 15 | O 13 | O 14 | O 12 | O X |

Part 2 measures proficiency with decimals. Sample problems similar to those found in Part 2 are shown below. The correct answers have been marked.

> | | | | | | | |
> |---|---|---|---|---|---|---|
> | 1. | .03 + 1.5 = | O 1.8 | ● 1.53 | O 4.5 | O 81 | O X |
> | 2. | .9 x .07 = | O .63 | O .97 | O 6.3 | ● .063 | O X |
> | 3. | 10 ÷ .2 = | O 5 | O .15 | O .5 | O 20 | ● X |
> | 4. | 8% of 30 = | ● 2.4 | O .02 | O .024 | O 3.8 | O X |

Part 3 measures proficiency with fractions. Sample problems similar to those found in Part 3 are shown below. The correct answers have been marked.

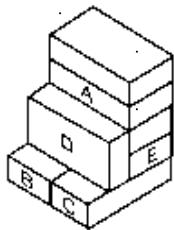|		O	O	O	●	O
1.	1/5 + 1/6 =	O 2/25	O 3/5	O 1/15	● 11/30	O X
2.	1 ÷ 1/3 =	O 30	O 1/3	O 13	● 3	O X
3.	1/2 - 2/5 =	● 1/10	O 1/5	O 3/5	O 3/10	O X
4.	3/8 x 2/9 =	O 6/17	O 5/17	●1/12	O 5/8	O X

The Numerical Ability placement screen allows you to demonstrate your ability to solve problems and process information in a short amount of time. This ability is important to success on the job.

SPACE VISUALIZATION
Space visualization refers to the ability to visualize forms in space and to manipulate objects mentally. This ability is a major component of basic mechanical ability. Physical jobs at PG&E routinely require this ability. The Space Visualization exercise has 50 questions consisting of pictures of piles of blocks. You indicate for a specific block how many other blocks in the pile it touches. Five blocks in each pile are labeled with the letters A through E, and you are asked to fill in the circles containing the correct number of other blocks each lettered block touches. There is a five-minute time limit to complete the exercise. A sample problem is shown below.

In the piles of blocks shown below, all of the blocks are the same size and shape. Your task is to look at each lettered block and figure out how many other blocks in the pile it touches. For each lettered block, show the number of other blocks it touches by filling in the circle with the correct number at the right of the letter.

The Space Visualization placement screen allows you to demonstrate your mechanical ability in a short amount of time. This ability is important to success on the job.

DO YOUR BEST

A general reference book is always invaluable as a supplement to other textbooks from classes or specific subjects, and as an instrument for general review in preparing for qualifying tests. Additional resources for improving your understanding of the concepts above may be found at your local libraries and bookstores.

We hope you find this information helpful. Make sure that when you are scheduled to take the test you are physically and mentally alert and ready to do your best, or you should reschedule your appointment.