



# Field and Technical Assessment

Introduction & Preparation Guide

Strategies | Samples | Further Readings



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## WELCOME!

Congratulations!

You are taking the first step to ensure your success on the Field and Technical Assessment and ultimately in your career at San Diego Gas & Electric. This test is designed to give you the opportunity to make the best use of your skills. This booklet will give you information about the procedures used to select employees as well as who is qualified and likely to be successful in the job. These procedures indicate how successful you are likely to be in the job for which you will apply.

This booklet gives you some tips for preparing for the tests, as well as suggestions on how to do your best. It also includes sample items so that you can practice for the actual test.

**Good Luck!**

## HOW TO USE THIS TEST GUIDE

This manual is divided into four sections aimed at helping you become more successful on your tests.

- Overview of the Field and Technical Assessment
- General test taking strategies applicable to all tests
- Guide to what to expect on the assessment including question descriptions and sample questions
- A list of resources that will provide test preparation resources

If you are a first-time test taker, take time to read through this entire manual and familiarize yourself with the test you will be taking.

If you are retaking a test, pay attention to the general test taking strategies, work through the sample problems, identify your weaknesses, and obtain one of the test preparation resources described at the back of this manual.

Let's get started!

## OVERVIEW



### *What is the Field and Technical Assessment?*

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The Field and Technical Assessment is an assessment that assesses attributes important for success in Field and Technical roles at San Diego Gas & Electric. This assessment is not timed, but is expected to take approximately an hour to complete. Please keep in mind that this assessment is meant to measure underlying knowledge, skills, abilities, and other characteristics that are critical to success in these roles. As such, the content within the assessment may not be identical to the situations, equipment, and tools that you will encounter in the role.

This test was also designed with the purpose to ensure that it is informative and helpful by providing you with information about the roles and responsibilities of those in Field and Technical jobs at San Diego Gas & Electric. The test will ask questions regarding how you handle work situations, your work style preferences, and your previous work experiences. Additionally, this test will ask questions regarding general computation skills and provide real-world scenarios to assess how you troubleshoot problems and your understanding of work equipment.

## Accommodations

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In accordance with the Americans with Disabilities Act (ADA), if you have a disability, you have the right to request an accommodation in the hiring and testing process. If you believe that your disability requires special arrangements to take the test(s), please contact [sdgestaffingquestions@sdge.com](mailto:sdgestaffingquestions@sdge.com) prior to taking the test(s).

Note: Once you submit the assessment, you cannot retake it or receive an accommodation for 6 months.

## Technical Requirements

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### System Requirements

- The Field and Technical Assessment can be completed on a PC, tablet, or smartphone. The realistic job preview (as discussed below) does contain audio, which will require speakers or headphones.

### Technical Support

- If you need technical support, please contact the Modern Hire Help Desk at 1-877-451-1695 or [support@modernhire.com](mailto:support@modernhire.com).

## TEST TAKING STRATEGIES

### *Before You Get Started*

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- Set aside approximately an hour to complete the test
- Complete in a distraction-free environment
- Have a calculator and scratch paper available
- This assessment **REQUIRES** audio, so please be sure your volume is turned on
- Be open and honest
- Note: Some screens may require scrolling
- Once you select **Next**, you won't be able to go back

### *Test Preparation and Tips*

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**The following section includes tips to help you when taking the assessment.**

The purpose of this section is to provide test taking tips that can be used prior to a testing session for better performance. The overarching goal of this section is to enable you to approach a challenging situation such as a test with the confidence that you are prepared for it, with a positive perspective on how you will perform during the test, and to eliminate test taking anxiety such that it does not affect your performance.

Specifically, this section is designed to help you:

- Better manage test taking-related stressors
- Identify techniques that you can use to prepare for a test
- Identify techniques you can use during a test to stay focused

### **Before the Test**

- **Pace yourself.** If you choose to prepare for your test, review the material (resources provided or practice problems) in several relatively short periods rather than a few long periods. Studying in several 30 – 60 minute sessions allows you to absorb the material more easily than if you were to cram large quantities of information at once.
- **Affirmations.** Before taking the test practice using affirmations such as:
  - “I am prepared for the test.”
  - “I will do well on the test.”
  - “I will be confident, focused, and calm while taking the test.”

## When You Begin

- **Stay positive!** The tests are not designed to trick you or be unnecessarily difficult. Start with a positive attitude and don't give up. Try to remember the hints that are outlined in this booklet and don't get discouraged if there are questions for which you don't know the answer. If you can't answer one, don't let that discourage you for the next items. No one is expected to get every answer right!
- **Read the directions and listen carefully to all test instructions.** Sometimes we assume we know what type of question we are answering, but many times test takers get answers wrong because they did not read the directions. An example of this would be the difference between mark all that apply, answer only one, and mark the one that does not belong.
- **Relax.** Feeling high amounts of stress or tension will cause you to forget what you know or think irrationally. Ways to reduce feelings of stress include preparing in advance, not talking with others who are stressed about the test immediately beforehand, making sure you understand the directions, and reviewing this guide.

## During the Test

- **Read each question carefully.** After reading each question, make sure you understand it clearly.
- **Do not make random guesses – narrow the response options down.** Try to eliminate at least one wrong answer before guessing. If you are given four choices and randomly guess, you only have a 25% chance of guessing the right answer—or a 75% chance of guessing the WRONG answer. Further, if you can eliminate just one wrong answer you have boosted your chances to 33%. Obviously, if you can eliminate two wrong answers your chances have gone up to 50%. When all else fails and you must make guesses:
  - **Be aware of key words:** “always,” “never,” “all,” or “none.” Consider these options carefully.
  - **Trust your “gut”:** Usually your first reaction is right.
- **Keep moving forward.** Once you answer a question and move on, you will **not** be able to come back to pages, questions, or sections on the assessment. As such, it is important to answer each question as best you can and keep moving forward.

## THE ASSESSMENT: WHAT TO EXPECT

### *Realistic Job Preview*

The assessment will begin with a Realistic Job Preview (RJP).

In the RJP, you will see and hear a realistic description of what the Field and Technical roles are like, and the challenges and rewards of these roles. **You will not have to answer any questions during this section**, it is meant only to give you helpful information about the roles of those in Field and Technical positions.

### *Explanations and Sample Questions*

#### Handle Work Challenges

In this part of the assessment, you will be presented with a variety of situations that you may encounter on the job. You will be asked to read each scenario and all possible response options, then select the responses most and least like how you would react to the situation.

#### Sample Item

*You and your coworker have a busy day filled with appointments. During the second appointment, you notice that one of your coworkers is not properly following safety protocols while working on fixing a wiring problem.*

*Which statement is most like how you would respond?*

- A. Ignore the issue, you have a lot to get done today and pausing to confront it would only add time.*
- B. Ask your coworker if you can take over fixing the wiring problem.*
- C. Ignore the issue for now and tell your supervisor about the safety issues when you see him later that day.*
- D. Confront your coworker and remind them of the importance of following the safety protocols set in place.*

*Which statement is least like how you would respond?*

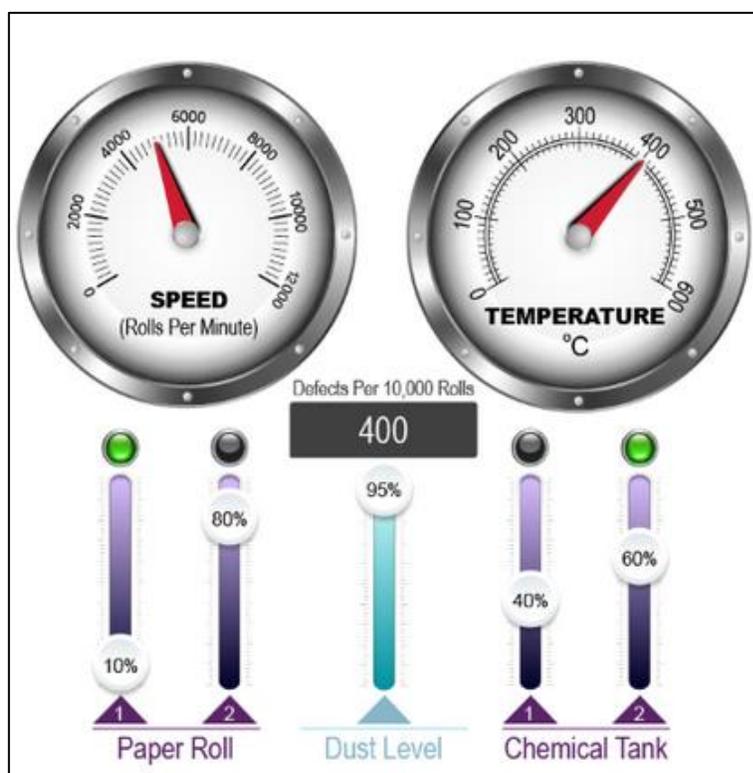
- A. Ignore the issue, you have a lot to get done today and pausing to confront it would only add time.*
- B. Ask your coworker if you can take over fixing the wiring problem.*
- C. Ignore the issue for now and tell your supervisor about the safety issues when you see him later that day.*
- D. Confront your coworker and remind them of the importance of following the safety protocols set in place.*

## Work with Equipment

In this exercise, you will interpret dial and gauge readings and integrate information from the provided Operating Guidelines. These guidelines will include acceptable operating ranges, as well as other key information, like risks to the machine and actions to take at specified levels. You will answer questions about a machine's functioning and actions you can take to improve it. You will also be monitoring your machine for errors that need to be reported. You will rely only on the information provided.

### Sample Item

Your machine just shut down, what is the most likely reason?



#### Operating Guidelines

##### **Acceptable Operating Range:**

- Speed:  $\leq 7500$  Rolls Per Minute (RPM)
- Temperature:  $\leq 500$  degrees C
- Paper Roll Level:  $> 10\%$
- Dust Level:  $> 95\%$
- Chemical Tank Level:  $> 10\%$

##### **Risk of Machine Shutdown When:**

- Speed  $\geq 8000$  RPM
- Temperature  $\geq 600$  degrees C
- Dust Level  $\geq 80\%$

##### **Actions:**

- Release coolant if temperature  $\geq 550$  degrees C
- Refill Paper Roll or Chemical Tank if Levels  $\leq 10\%$
- Release Dust Cleaner if Level  $\geq 95\%$

**Note:** Green Light Indicates Paper Roll or Chemical Tanks is in Use

Answer Options:

- Chemical Tank 2 is too high
- Dust Level is too high
- Machine temperature is too high
- Speed is too high

## Troubleshoot Problems

In this exercise, you will troubleshoot problems to showcase your analytical skills. You will be presented with a system, including inputs, system parts, and both actual and expected outcomes. You will also be provided with rules that describe how each part functions when broken and when working. For each question, you will be asked to determine which part is broken. There will only be one broken part per question. You will rely only on the information provided.

Sample Item	
<p><b>All parts when broken:</b> Allow all ★ and all ◆ to pass through</p> <p><b>1</b> <u>When working:</u> Allows one ★ and one ◆ to pass through</p> <p><b>2</b> <u>When working:</u> Eliminates one ★ and allows all other shapes to pass through unchanged</p>	<div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;">Input    ★ ◆ ◆</div> <div style="text-align: center;"> <div style="border: 1px solid black; background-color: black; color: white; width: 30px; height: 30px; margin: 5px auto; display: flex; align-items: center; justify-content: center;">1</div> <div style="border: 1px solid black; background-color: black; color: white; width: 30px; height: 30px; margin: 5px auto; display: flex; align-items: center; justify-content: center;">2</div> </div> <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;">Actual Outcome    ★ ◆</div> <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;">Expected Outcome    ◆</div>
<p><i>Which part is broken?</i></p> <p>A. 1 B. 2 C. None D. Both 1 and 2</p>	

## Work with Numbers

In this exercise, you will solve math problems similar to the ones you may encounter in the role. You may want to use a calculator or scratch paper for this exercise.

Sample Item
<p><i>You are bringing a load of equipment to a work cite. In order to be as efficient as possible, you want to pack as much equipment onto the truck as you can. The truck can safely support up to 6,400 pounds. You currently have 1,248 pounds of equipment loaded. You decide to add in 850 pounds of concrete and some pipes. Each pipe weighs 717 pounds – how many can you safely add to the truck?</i></p> <p>A. 3 B. 4 C. 5 D. 6</p>

## What Drives You

In this exercise, you will help us understand what kind of work environment motivates and inspires you. For each pair of statements in this exercise, decide which describes the type of job or work environment you prefer.

### Sample Item

*I prefer a job where...*

- A. *The company I work for is extremely well known.*
- B. *Safety protocols are strongly enforced.*

## Tell Us Your Story

We value the wide variety of backgrounds our associates bring to their work, and this section will ask how your background has shaped who you are. If you do not have previous work experience, you can think of your academic and extracurricular experiences. It is important to be open and honest.

### Sample Item

*How many years of experience do you have performing maintenance on equipment and/or machines?*

- A. *Less than 1 year*
- B. *1 year*
- C. *2 years*
- D. *3 years*
- E. *4 years*
- F. *5 years*
- G. *6+ years*

## Describe Your Approach

Everyone brings a unique approach to their work. This exercise will ask about your style at work. For each pair of work style statements, you will decide which one describes you best. When responding to these questions, think of work situations rather than your personal life.

### Sample Item

*You will be asked to select the statement that describes you more, and then select whether that statement is somewhat or most like you.*

Inconveniences at work often frustrate me.    OR    I can easily adapt to a change in workflow.

Most

Somewhat

Somewhat

Most

## FURTHER RESOURCES:

Below you will find some test taking resources for various competencies or skills that may be particularly relevant to the job in which you are applying as well as for this assessment. These resources are listed to help you develop your current skills.

Please note that SDG&E is in no way affiliated with any of these resources, they are only listed for your convenience.

### Generalized Knowledge

Competencies and skills that fall under the category Generalized Knowledge that may be particularly useful for the job in which you are applying include knowledge of:

- Customer service
- Computers and electronics
- Mathematics
- Public safety and security

Resources to help you further develop skills in these areas:

- **Customer Service:** *20 Tips to Improve Your Customer Service Skills: For Representatives and Managers:* An article from Qualtrics detailing tips for great customer service.
  - **Web address:** <https://www.qualtrics.com/experience-management/customer/service-tips-skills/>
- **Computer Skills:** GCF Global: Includes free tutorials for individuals who want to learn more about technology and computers. Lessons include tutorials in Excel, PowerPoint, Word, along with Internet Safety. Also includes other topics such as resume writing, interviewing skills, and job networking.
  - **Web address:** <https://edu.gcfglobal.org/en/>
- **Free Math Help:** Includes free lessons covering algebra, calculus, geometry, and statistics
  - **Web address:** [www.freemathhelp.com](http://www.freemathhelp.com)

## Interacting and Communicating with Others

Competencies and skills that fall under the category Interacting and Communicating with Others that may be particularly useful for the job in which you are applying include the ability to:

- Be an active listener
- Effectively communicate with others
- Be socially aware
- Communicate effectively through writing

Resources to help you further develop skills in these areas:

- **Becoming a better listener:** Ted Talk: “5 Ways to Listen Better”, *Julian Treasure*
  - **Web address:** [https://www.ted.com/talks/julian\\_treasure\\_5\\_ways\\_to\\_listen\\_better?referrer=playlist-listen\\_up](https://www.ted.com/talks/julian_treasure_5_ways_to_listen_better?referrer=playlist-listen_up)
- **Communicating Effectively:** Book: *How to Talk to Anyone: 92 Little Tricks for Big Success in Relationships*, Leli Lowndes
- **Communicating Effectively:** Ted Talk, “10 Ways to Have a Better Conversation”, *Celeste Headlee*
  - **Web address:** [https://www.ted.com/talks/celeste\\_headlee\\_10\\_ways\\_to\\_have\\_a\\_better\\_conversation/transcript](https://www.ted.com/talks/celeste_headlee_10_ways_to_have_a_better_conversation/transcript)
- **Writing Effectively:** Purdue Online Writing Lab: Includes short reading lessons on topics including grammar, punctuation, sentence clarity, and effective transitions.
  - **Web address:** [https://owl.purdue.edu/owl/purdue\\_owl.html](https://owl.purdue.edu/owl/purdue_owl.html)

## Interacting with Machines/Processes

Competencies and skills that fall under the category Interacting with Machines/Processes that may be particularly useful for the job in which you are applying include knowing how to:

- Monitor operations
- Troubleshoot
- Repair machines
- Select correct tools for the job

Resources to help you further develop skills in these areas:

- **Troubleshooting:** Ted Talk, “Got a wicked problem? First, tell me how you make toast”, *Tom Wujec*
  - **Web address:** [https://www.ted.com/talks/tom\\_wujec\\_got\\_a\\_wicked\\_problem\\_first\\_tell\\_me\\_how\\_you\\_make\\_toast#t-2402](https://www.ted.com/talks/tom_wujec_got_a_wicked_problem_first_tell_me_how_you_make_toast#t-2402)

## Self-Management Skills

Competencies and skills that fall under the category Self-Management Skills that may be particularly useful for the job in which you are applying include the ability to:

- Assess performance to make improvements
- Manage time effectively

Resources to help you further develop your skills in these areas:

- **Time Management:** *Fundamentals of Time and Task Management:* an article from the Center for Academic and Personal Development at Harvard University on how to better manage time.
  - **Web address:** [https://hwpi.harvard.edu/files/complit/files/fundamentals\\_of\\_time\\_and\\_task\\_management.pdf](https://hwpi.harvard.edu/files/complit/files/fundamentals_of_time_and_task_management.pdf)
- **Time Management:** *Time Management: 10 Strategies for Better Time Management:* an article from University of Georgia, Extension
  - **Web address:** <https://extension.uga.edu/publications/detail.html?number=C1042>

## Thinking Skills

Competencies and skills that fall under the category Thinking Skills that may be particularly useful for the job in which you are applying include skills such as:

- Reading Comprehension
- Critical Thinking
- Inductive and Deductive Reasoning
- Number Facility
- Problem Sensitivity
- Selective Attention

Resources to help you further develop your skills in these areas:

- **Reading Comprehension:** ACT reading comprehension sample test questions with answers and explanations
  - **Web address:** <https://www.act.org/content/act/en/products-and-services/the-act/test-preparation/reading-practice-test-questions.html?page=0&chapter=1>
- **Critical Thinking:** Ted Talk, “5 Tips to Improve Your Critical Thinking”, *Samantha Agoos*
  - **Web address:** [https://www.ted.com/talks/samantha\\_agoos\\_5\\_tips\\_to\\_improve\\_your\\_critical\\_thinking](https://www.ted.com/talks/samantha_agoos_5_tips_to_improve_your_critical_thinking)
- **Inductive and Deductive Reasoning:** Practice logic puzzles, games such as Sudoku, and pattern puzzles.

- **Selective Attention:** *4 Simple Exercises to Strengthen Your Attention and Reduce Distractibility:* An article by Rebekah Barnett, 2018 for TED.
  - **Web address:** <https://ideas.ted.com/4-simple-exercises-to-strengthen-your-attention-and-reduce-distractibility/>

## Work Styles

Work styles that may be particularly useful for the job in which you are applying include skills such as:

- Attention to detail
- Dependability
- Integrity
- Cooperation
- Self-Control
- Independence
- Stress Tolerance
- Persistence
- Adaptability/Flexibility
- Analytical thinking

Resources to help you further your skills in these areas:

- **Attention to Detail:** *6 Tips and 4 Exercises to Improve Your Attention to Details:* An article from New Health Advisor providing tips and methods to improve attention to detail.
  - **Web address:** <https://www.newhealthadvisor.org/how-to-improve-attention-to-detail.html>
- **Integrity:** *How to Achieve Integrity in the Workplace:* An article by Hallie Crawford for U.S. News: An article about how to show integrity in the workplace and why it is important
  - **Web address:** <https://money.usnews.com/money/blogs/outside-voices-careers/articles/how-to-achieve-integrity-in-the-workplace>
- **Stress Tolerance:** *Best Ways to Manage Stress:* An article from Harvard Health Publishing, Harvard Medical School explaining the stress response, how to recognize it, and how to manage it.
  - **Web address:** <https://www.health.harvard.edu/mind-and-mood/best-ways-to-manage-stress>
- **Adaptability/Flexibility:** *4 Ways to Boost Your Adaptability Skills:* An article by Anne Converse Willkomm: An article from Drexel University explaining what adaptability is, why it's beneficial, and some ways to improve one's ability to be adaptable.
  - **Web address:** <https://drexel.edu/goodwin/professional-studies-blog/overview/2019/September/4-ways-to-boost-your-adaptability-skills/>