

# ACT Science Test Tips

## What will the ACT Science Test look like?

40 questions in 35 minutes.

Science test scale score: 1 - 36 (no subscore)

Content	%	# of ?s
Data Representation	38%	15
Research Summaries	45%	18
Conflicting Viewpoints	17%	7

Composite score: 1 - 36 (average of all 4 test scale scores)

## PACING

1 minute less than the # of ?s in a passage. For example, if a passage has 5 ?s, then answer in 4 minutes.

Don't read the instructions!  
Read instructions BEFORE test day! (see back side)

**Types of Passages:** 7 passages containing a mixture of graphs, charts, and explanatory text. Each passage has 5-7 ?s. The passages cover biology, earth/space sciences, chemistry, and physics. The subject matter is largely irrelevant to what you're trying to accomplish because the test assesses your ability to understand and analyze data. Emphasizes scientific reasoning skills. All of the information you need to know is in the questions. Just have to dig it out.

- **3 Data Representation passages.** This format presents graphic and tabular material similar to that found in science journals and texts. The questions associated with this format measure skills such as graph reading, interpretation of scatterplots, and interpretation of information presented in tables.
- **3 Research Summaries passages.** This format provides descriptions of one or more related experiments. The questions focus upon the design of experiments and the interpretation of experimental results.
- **1 Conflicting Viewpoints passage.** This format presents expressions of several hypotheses or views that, being based on differing premises or on incomplete data, are inconsistent with one another. The questions focus on the understanding, analysis, and comparison of alternative viewpoints or hypotheses.

## TEST STRATEGY

1. Don't be afraid of the scientific jargon.
2. Read the passage first.
3. Answer the ?s by playing the matching game.
4. Base your answers on the passage.
5. ?s are roughly in order of increasing difficulty.



## Composite FYI

- \* 23 composite: answer 24-25 ?s correctly.
- \* 26 composite: answer 30 ?s correctly.
- \* 30+ answer 35-40 ?s correctly.
- \* The above are approximates.
- \* Difficult ?s worth same as easy ones.  
Answer easy ones for more points – GUESS on tough ones. No penalty for wrong answers!



#### 4 main kinds of questions on the Data Representation and Research Summaries passages:

- **Read the chart.** Identify information given on the chart.
- **Use the chart.** For example, some ?s might ask you to make an informed guess as to what would happen if one of the variables in an experiment changed.
- **Handle graphs.** Will either have to translate the information in the charts into words or translate words or numbers into a chart.
- **Take the Next Step:** Generally, will provide you with a goal for an experiment and the current scenario. You must decide the next step that should be taken to achieve that goal.

#### 3 types of questions for the Conflicting Viewpoints section:

- **Detail:** Identify specific information from the arguments.
- **Inference:** draw out implied information from the arguments.
- **Comparison:** find and analyze similarities and differences between the arguments.

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## Instructions for the Science Test

Don't waste a single minute reading instructions during the test. Learning them the before the day of the test saves valuable time and effort! The Science instructions are below, so get to reading!

**DIRECTIONS:** The passage in this test is followed by several questions. After reading the passage, choose the best answer to each question and fill in the corresponding oval on your answer document. You may refer to the passage as often as necessary.

You are NOT permitted to use a calculator on this test.

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## ACT College & Career Readiness Standards

<http://www.act.org/content/act/en/college-and-career-readiness/standards.html>

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## Test Prep

- ACT online prep: <https://academy.act.org/>
- ACT sample test: <http://www.act.org/content/act/en/products-and-services/the-act/test-preparation/science-practice-test-questions.html?page=0&chapter=0>
- ACT Student app in iTunes & Play Store
- Preparing for the ACT booklet:
  - <http://www.act.org/content/dam/act/unsecured/documents/ACT-StudentInfoBooklet.pdf>
- *The Real ACT Prep Guide* book (from the makers of the ACT): find in bookstores
- *Cracking the ACT* by The Princeton Review: find in bookstores
- March 2 Success: <https://www.march2success.com/main/learnmore/satact>