**ACT Help Guide**

## **Changes:**

The ACT science section has had some recent changes. Although there is no way to know for sure what the test will look like, here are some of the possible changes to the traditional format:

**Traditional** (still used in conventional ACT Prep books)

|  |  |  |
| --- | --- | --- |
| Passage Type | Passage | Questions per Passage |
| Data Representation | 3 | 5 |
| Research Summaries | 3 | 6 |
| Conflicting Viewpoints | 1 | 7 |

**New Format**

|  |  |  |
| --- | --- | --- |
| Passage Type | Passage | Questions per Passage |
| Data Representation | 2 | 6 (7) |
| Research Summaries | 3 | 7 (6) |
| Conflicting Viewpoints | 1 | 7 |

## **Helpful Tips:**

Even though the new format appears to have fewer passages, it has been reported by test takers over the last couple of years that their test scores were lower than their test preparation scores. You can expect 6 passages, 40 questions, and 35 minutes to answer them.

Try these 3 helpful hints for preparing for the ACT Science section:

1. **Practice your pacing:** Don’t wait until two weeks before your test to get started. You will only have less than 6 minutes per passage, so you may want to start practicing by only doing 5 passages, allotting 7 minutes per passage. Once you can confidently do 5 passages with reasonable accuracy, work your way up to 6 passages.
2. **Always refer back to the passage:** You won’t be able to memorize the information presented in the passages; it’s too overwhelming. Read the passages to understand the gist and the data that is presented, but also move back to the passage to locate the information you need to answer. Memory alone will not suffice, and you may find it helpful to jot down a few short notes on each passage. Drawing arrows and circling important info is also a great idea.
3. **Adopt a strategy for each of the 3 formats:** ACT Science Test passages come in three forms: Data Representation, Conflicting Viewpoints, and Research Summaries. You will need to modify your approach slightly for each one. **Data Representation** focuses mostly on charts, graphs, and tables, so you will need to practice identifying trends and understanding the layout of variables. **Conflicting Viewpoints** typically has no diagrams and is more like the paired passages you might remember if you took the SAT**. Research Summaries** describe one or more experiments. You will need to understand the Purpose, Method, and Results for each experiment, and know what the similarities and differences were between them. Don’t treat these 3 formats all the same – they are each quite unique!

## **Here are 5 more tips from Kaplan® to assist you:**

**ACT Science Tip #1: Follow the recommended ACT science method**

1. Read the passage, identifying and marking the **purpose** of the experiment, the **method** used, and

 the **results**.

1. Scan figures, identifying variables and patterns.
2. Find support for the answer in the passage.

**ACT Science Tip #2: Know the ACT science passage types**

* **Data Representation** (2 of this type): presents information about a topic
* **Research Summary** (3 of this type): presents a series of experiments
* **Conflicting Viewpoints** (1 of this type): discusses different theories about a single topic

**ACT Science Tip #3: Know the ACT science question types**

1. **Figure Interpretation** – examine tables & graphs
2. **Patterns** – describe the relationship between the variables, plot data from the table, or describe

the shape of a curve

1. **Scientific Reasoning** – understand the reasons behind an experimental setup

**ACT Science Tip #4: Know the commonly used terms**

* **Independent variable**: the variable that scientists intentionally change
* **Dependent variable**: the variable that the scientists are measuring
* **Constants**: parts of the experiment that the scientists keep the same
* **Direct relationship**: As the independent variable increases or decreases, the dependent variable

does the same

* **Indirect relationship**: As the independent variable increases or decreases, the dependent variable

does the opposite

**ACT Science Tip #5: Know your overall ACT science strategy**

1. When tackling the ACT science section, ask yourself:
* What did the scientists study?
* How did they study it?
* What did they find?
* Why is the experiment set up this way?
* What is measured? What is controlled by the scientists?
* Is there a pattern?
* What are the similarities? What are the differences?
1. Know that the halfway mark is at about 17 minutes – you should be done with 20 questions at that

point.

1. Circle detail words in the question stem like “NOT”, “Experiment 1”, “Table 1”, etc.

## **resources:**

Cheat Sheet taken directly from:

<https://www.quesbook.com/blog/changes-to-the-act-science-test-format>

<https://www.kaptest.com/study/act/8-must-know-act-science-tips/>

More helpful resources:

<https://www.quesbook.com/act/study>

<http://www.act.org/content/dam/act/unsecured/documents/Preparing-for-the-ACT.pdf>

<https://www.quesbook.com/blog/best-act-prep-resources-practice-tests-study-guides-websites-and-prep-books>

<https://www.quesbook.com/blog/top-5-tips-to-improve-your-act-science-score>

<https://www.quesbook.com/blog/time-management-a-key-to-success-on-the-act>

<https://www.quesbook.com/blog/what-science-is-on-the-act>

<https://magoosh.com/hs/act/act-announcements/2016/free-act-flashcard-app-from-magoosh/>

## **online practice tests:**

<http://www.act.org/content/act/en/products-and-services/the-act/test-preparation/science-practice-test-questions.html?page=0&chapter=0>

<http://www.crackact.com/act/science/>

<http://www.highschooltestprep.com/act/science/>

<https://www.varsitytutors.com/act_science-practice-tests>

<https://www.mometrix.com/academy/act-science-practice-test/>



