

ACT Science Review

Seven Tips from a Perfect Scorer - Notes

Source: <https://blog.prepscholar.com/how-to-improve-your-act-science-score-tips-from-perfect-scorer>

These tips are for students scoring in the 14-24 range and would like to improve.

These suggestions can also help a student break out of this range and get to a 26 score.

Overview:

- You don't have to know much actual science. (national test -- tries to make it possible for everyone, regardless of what specific courses they had in school)
- It's more about reading comprehension, understanding graphs and logic.
- Learn the types of questions.
- Put together the concepts to answer the questions.
- Practice a lot of these questions.

How many questions do you need to answer correctly?

Scale Score	Raw Scores				Scale Score
	Test 1 English	Test 2 Mathematics	Test 3 Reading	Test 4 Science	
36	75	60	40	40	36
35	72-74	58-59	39	39	35
34	71	57	38	38	34
33	70	55-56	37	37	33
32	68-69	54	35-36	—	32
31	67	52-53	34	36	31
30	66	50-51	33	35	30
29	65	48-49	32	34	29
28	63-64	45-47	31	33	28
27	62	43-44	30	32	27
26	60-61	40-42	29	30-31	26
25	58-59	38-39	28	28-29	25
24	56-57	36-37	27	26-27	24
23	53-55	34-35	25-26	24-25	23
22	51-52	32-33	24	22-23	22
21	48-50	30-31	22-23	21	21
20	45-47	29	21	19-20	20
19	43-44	27-28	19-20	17-18	19
18	41-42	24-26	18	16	18
17	39-40	21-23	17	14-15	17
16	36-38	17-20	15-16	13	16
15	32-35	13-16	14	12	15
14	29-31	11-12	12-13	11	14
13	27-28	8-10	11	10	13
12	25-26	7	9-10	9	12
11	23-24	5-6	8	8	11
10	20-22	4	6-7	7	10
9	18-19	—	—	5-6	9
8	15-17	3	5	—	8
7	12-14	—	4	4	7
6	10-11	2	3	3	6
5	8-9	—	—	2	5
4	6-7	1	2	—	4
3	4-5	—	—	1	3
2	2-3	—	1	—	2
1	0-1	0	0	0	1

If your goal is a 26 in science, you need to get 30 questions out of 40 correct.

If your goal is a 23 in science, you need to get 25 questions out of 40 correct.

SEVEN TIPS

1. Don't waste time understanding useless details.

Skim the passage and understand the passage at a very high level. Answer these two questions only:

- What's the main point here?
- What's the figure showing?

Open this link for example questions: scroll down to Tip 1.

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2. Understand what ACT science actually tests.

Here are the passage types and question types associated with them:

- 3 Data Representation Passages - describes a study, heavy on graphs and charts
 - Read-the-Graph Questions
 - Interpreting Trends
 - Calculating Values
- 3 Research Summaries Passages - describes an experiment with multiple parts
 - Experimental Design
 - Hypothetical Experimental Changes
 - Interpreting Experiments
- 1 Conflicting Viewpoints Passage - 2 or more scientists disagree
 - Understanding Viewpoints
 - Comparing Viewpoints

Remember that the ACT Science tests basic skills you've learned before in school. This is it - reading graphs, the scientific method, and comparing viewpoints.

3. Learn how to read graphs.

Nearly half of all questions on the test will relate to reading a graph and making sense of it. Often, the graph will be in a totally unfamiliar subject you've never learned about. The units will be weird, and the shape of the graph might be weird.

ACT Science is designed so that YOU are fully capable of understanding everything you need to answer the questions right - if you learn the right skills.

The three most important steps you need to understand every single graph are:

1. Skim the intro text. Often the passage will tell you literally "Figure 2 is about X" and this is a big head start. (Like I said in Tip #1, though, don't get bogged down in details.)
2. Read the axes. What does the x-axis represent, and what changes as you move from left to right? What does the y-axis represent, and what changes as you move from bottom to top? This

tells you what is actually being shown.

3. Understand the general shape of the graph. Where is it going up or down? If there are multiple lines shown, how do they differ? I mean GENERAL - don't memorize every detail, just get a sense of what's going on.

Open this link for example questions: scroll down to Tip 3.

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If you keep practicing these skills over and over again, you WILL become much better at getting more questions right.

4. Understand your weaknesses and keep drilling them.

Most students actually actively avoid improving their weaknesses. As a result, they waste a ton of time studying without any actual improvement.

Here's a step by step guide on how to find your weaknesses:

1. Categorize every practice question you take by skill, especially for practice tests (working with data, understanding experiments, conflicting viewpoints). Try to categorize as accurately as possible.
2. Keep track of how many questions you got right and wrong in each skill.
3. Identify the skills you're missing the most number of questions in. Don't just focus on the % correct - what really matters is how many more points you can get by mastering that skill. For example, there might be a really uncommon skill that shows up just once on every test. Even if you get 0% of those questions right, it's not lowering your score much. It's much better to work on the skill that appears 10 times per test that you're getting 50% of questions right on.
4. Find the best resources to train your weakness. You need a way to 1) learn the underlying skills, 2) find practice questions to keep drilling that skill.

Sound overwhelming? It is a lot of hard work, but it's the most effective way to improve. Most students don't take the time to do this, which is why they don't improve their score.

5. Use only high quality practice materials.

The very best source of practice questions is [official ACT practice tests](#). These are official tests previously administered to real students.

6. Track your time per passage and question.

ACT Science has tough time pressure. You only have 35 minutes to get through 7 passages and 40 questions.

Furthermore, unlike [ACT Math](#), the questions and passages aren't arranged in difficulty. Therefore, you can't predict ahead of time which questions are going to be harder, and just skip the hardest questions.

This means you need to **hustle** to get through all the passages and questions.

But there's good news. Remember what we said above? **To get a 26 on ACT Science, you can miss 10 questions.**

This means you don't have to fret about getting every question correct. In fact, there are some questions that are so hard that you will never get them right, no matter how much time you spend.

Therefore, I have two recommendations:

- **Spend no more than 1.5 minutes reading each passage.** This takes 10.5 minutes away from 35 minutes. From the tip above, you already know that you don't need to actually read the entire passage to answer the questions.
- **Spend no more than 30 seconds trying to answer each question.** This takes away another 20 minutes. If you get stuck on a question and have no idea how to solve it, MOVE ON. You do NOT want to spend 90 seconds on one question - that's time better spent getting more questions right.

When done right, this gives you a few spare minutes to go back to some tough questions and try to get them right.

See a question that you have constant trouble with? Feel free to skip it and come back to it later.

As you practice, it might help to have a timer by your side. 90 seconds for reading a passage passes a LOT more quickly than you would expect.

7. Don't worry about memorizing science.

ACT Science isn't really a test on science. It's a scientific reasoning test, based mostly on scientific data you've never seen before.

Aside from a few questions about basic scientific concepts (like natural selection and electrical charges), nearly everything else can be answered without a deep foundation in the subject matter.

The best way is to focus on the test:

- Understand what's tested on ACT Science
- Know how to approach ACT Science passages - don't get stuck in the details
- Understand your skill weaknesses, and drill them
- Practice time management so you can get through all the questions.