Resource Manual

Expert Tips for ACT Science





Before reviewing specific tips for the ACT Science section, let's ensure you know the rules that apply to the entire test.

Never leave an answer choice blank. There is no penalty for a wrong answer, so you should always provide an answer, even if it's a guess.

When practicing, never leave a mistake behind. You'll repeat errors if you don't identify and learn from them, so you must understand the answer to every question you ever practice. The best way to make sure you actually know a concept is to teach it to someone else.

Never do a timed practice without a scantron. Yes, you have to practice bubbling. Many students make mistakes by filling in a different bubble than they intended or by skipping a line. Don't be one of them.

Format of the ACT Science Section

The 40 questions are divided into six passages: two figures & tables (6 questions each), three experiments (7 questions each), and one debating scientists (7 questions).



10 Tips for the ACT Science



Now for the specific tips:

1. Know your pace

Remember the ACT science section isn't about science; it's about combining your reading and data analysis skills. Pacing is essential. Like the ACT Reading section, your score may improve if you know when to invest time in a question and when to skip around.

2. Annotate

The science passages are incredibly dense and provide tons of extraneous information. While referencing a section, underline key information, sketch in the margins, or feel free to put little arrows for diagrams. Do what you need to do to break up the content into digestible pieces.

3. Relive 3rd grade science class

Although the test uses scientific terminology, very little knowledge of science is needed. In the 1 or 2 questions (out of 40) that require specific scientific knowledge, the content will be quite basic: opposite charges attract and like charges repel, or the difference between an independent variable and dependent variable. No specific chemistry, biology, or physics knowledge is required.

4. Play hide-and-go-seek

The answer is always in the passage; it's that explicit. Everything's there, waiting for you to find it.

5. Remember - it's just a reading section in disguise

Whatever is being asked, the answer is in the passage; the answer is in the figure; the answer is in the table. You just have to go back and find it. We tell students all the time, "if you had all day to do the science section, we would expect you not to miss a single question because everything you need to answer the questions is provided to you." What makes the science section challenging is the time pressure. Solution: practice and become comfortable, so you won't feel surprised.

6. Know types of passages

Figures & Tables passages will require you to interpret or analyze information provided in charts, graphs, and tables. Experiments passages test the design, execution, and results of experiments described. The Debating Scientists passage requires you to analyze and compare different viewpoints, theories, or hypotheses on a specific scientific phenomenon.

7. Trust the question

If a question says, "according to Table 1," then the answer is in Table 1. If a question says, "according to Figure 1 and Figure 2," then you won't be able to answer the question without synthesizing information from both of those figures. You can trust the question. No trickery or lying is allowed. If you are told where to look, that's where you want to look.

8. Embrace your inner scientist

Again, you're not being tested on specific scientific content, but you are being tested on your ability to recognize patterns. Consider two scientists debating why dinosaurs went extinct. On what do the scientists agree? What are differences in their opinions? Use your inner scientist to recognize patterns and observe overlap or difference in opinion.

9. Love relationships

Direct and indirect relationships are frequently tested. This is a little bit of math, but remember direct relationships mean that two variables go in the same direction. If one goes up, the other goes up, and if one goes down, the other goes down. In indirect relationships, variables go in opposite directions: if one goes up, the other goes down. That's it.

10. Look for similarities and differences

As we already mentioned, a lot of what you're going to be doing is looking for similarities and differences. As an example, consider an experiment conducted at 10° and then at 20° and then at 30°. In what ways did the changing temperatures change the results? In what ways did the results stay the same even when the temperature was increased? That's what you're really trying to understand and take away.

As you dive into the ACT Science section, be prepared to make pacing decisions. At multiple points, you'll have to decide whether to stick with difficult questions within a passage or to move on to the next passage hoping to find easier questions. Practice your pacing, and you'll know what choice is the right one.