## **ACT Science Test**

The ACT science test consists of 40 questions within 35 minutes. These questions cover the *biological sciences*, *physical sciences*, *chemistry*, and *physics*. You should average about 1 completed question per .8 minutes on this part of the ACT test.

It is **not necessary to memorize** *scientific definitions, principles, and data to pass this part of the ACT test.* You **only have to review the passage or diagram and identify the relationships presented**. This section of the ACT test focuses heavily on **graphs** and **charts**. Always read the title of the graph and chart. Identify the information presented on the x and y axis to help you understand the relationships of the data presented.

The test presents seven sets of scientific information, each followed by a number of multiple-choice test questions. The scientific information is conveyed in one of three different formats: data representation (graphs, tables, and other schematic forms), research summaries (descriptions of several related experiments), or conflicting viewpoints (expressions of several related hypotheses or views that are inconsistent with one another).

The questions require you to recognize and understand the basic features of, and concepts related to, the provided information; to examine critically the relationship between the information provided and the conclusions drawn or hypotheses developed; and to generalize from given information to gain new information, draw conclusions, or make predictions. The use of calculators is not permitted on the Science Test.

One score is reported for the ACT Science Test: a total test score based on all 40 questions.

Frequently asked questions

Official ACT website: <a href="http://www.act.org/">http://www.act.org/</a> Site Map: <a href="http://www.act.org/site.html">http://www.act.org/site.html</a>

Sample Test Questions: <a href="http://aapsample.act.org/aap/sampletest/index.shtml">http://aapsample.act.org/aap/sampletest/index.shtml</a>

Tips for Successful Test Taking

Practice Exam: <a href="http://www.4tests.com/exams/examdetail.asp?eid=13">http://www.4tests.com/exams/examdetail.asp?eid=13</a>

## **Tips for Taking the ACT Science Test**

Pace yourself.
Read the passag

Read the passage carefully.Note different viewpoints in passages.

 Don't be intimidated by vocabulary – even if you don't know the words. ALL the information you need will be available.

## **Content Covered by the ACT Science Test**

The content of the Science Test includes biology, chemistry, physics, and the Earth/space sciences (for example, geology, astronomy, and meteorology). Advanced knowledge in these subjects is not required, but background knowledge acquired in general, introductory science courses is needed to answer some of the questions. The test emphasizes scientific reasoning skills over recall of scientific content, skill in mathematics, or reading ability.

The scientific information is conveyed in one of three different formats:

- Data Representation (38%). 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, diagrams, and figures.
- Research Summaries (45%). This format provides descriptions of one or more related experiments. The questions focus on the design of experiments and the interpretation of experimental results.
- Conflicting Viewpoints (17%). 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.