What is tested on the Science portion of the ACT?
(from ACT.org)

The science section measures the interpretation, analysis, evaluation, reasoning, and problem-solving skills required in the natural sciences. The section presents several authentic scientific scenarios, each followed by a number of multiple-choice questions. The content includes biology, chemistry, Earth/space sciences (e.g., geology, astronomy, and meteorology), and physics. Advanced knowledge in these areas is not required, but background knowledge acquired in general, introductory science courses may be needed to correctly answer some of the questions.

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.

Note: You are not permitted to use a calculator in the science section.

The scientific information appears in one of three formats:

- **Data Representation (30–40%)**: 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 recognizing relationships among data in tables and graphs; interpolation and extrapolation; and translating tabular data into graphs.

- **Research Summaries (45–55%)**: This format provides descriptions and results of one or more related experiments. The questions focus on the design of the experiments and the interpretation of experimental results.

- **Conflicting Viewpoints (15–20%)**: This format presents two or more explanations for the same scientific phenomena that, because they are based on differing premises or incomplete data, are inconsistent with one another. The questions focus on the understanding, analysis, and comparison of alternative viewpoints or hypotheses.

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 knowledge acquired in general, introductory science courses is needed to answer some of the questions. The science test stresses science skills and practices over recall of scientific content, complex mathematics skills, and reading ability. A brief description and the approximate percentage of the test devoted to each reporting category is given below.

Four scores are reported for the science section: a score for the section overall and three reporting category scores based on scientific knowledge, skills, and practices. The approximate percentage of the section devoted to each reporting category is:

Interpretation of Data (40–50%)
This category asks you to manipulate and analyze scientific data presented in scientific tables, graphs, and diagrams (e.g., recognize trends in data, translate tabular data into graphs, interpolate and extrapolate, and reason mathematically).

Scientific Investigation (20–30%)
This category requires you to understand experimental tools, procedures, and design (e.g., identify controls and variables) and compare, extend, and modify experiments (e.g., predict the results of additional trials).

Evaluation of Models, Inferences, and Experimental Results (25–35%)
These questions ask you to judge the validity of scientific information and formulate conclusions and predictions based on that information (e.g., determine which explanation for a scientific phenomenon is supported by new findings).