



**Figure 3** Natural science covers a very broad range of knowledge. **Interpreting Diagrams** How could you change this diagram to show how the branches of science can overlap?

## Branches of Science

The study of science is divided into social science and natural science. **Natural science is generally divided into three branches: physical science, Earth and space science, and life science.** Each of these branches can be further divided, as shown in Figure 3.

Physical science covers a broad range of study that focuses on non-living things. The two main areas of physical science are chemistry and physics. **Chemistry** is the study of the composition, structure, properties, and reactions of matter. **Physics** is the study of matter and energy and the interactions between the two through forces and motion.

The application of physics and chemistry to the study of Earth is called Earth science. The foundation of Earth science is **geology**, the study of the origin, history, and structure of Earth. Geology has traditionally focused on the study of Earth's rocks. However, modern Earth science also involves the study of systems that may include living organisms. The foundation of space science is **astronomy**, the study of the universe beyond Earth, including the sun, moon, planets, and stars.

The study of living things is known as **biology**, or life science. Biology is not only the physics and chemistry of living things, but the study of the origin and behavior of living things. Biologists study the different ways that organisms grow, survive, and reproduce.

The problem with subdividing science into different areas is that there is often overlap between them. The boundary around each area of science is not always clear. For instance, much of biology is also chemistry, while much of chemistry is also physics. And a rapidly growing area of physics is biophysics, the application of physics to biology.



**Reading  
Checkpoint**

*What is physical science?*