



# Comparison of *Benchmarks* and *NSES* Nature of Science

*NSES* Science and Technology

Grades 9-12

Understandings about Science and Technology

**Scientists in different disciplines ask different questions, use different methods of investigation and accept different types of evidence to support their explanations. Many scientific investigations require the contributions of individuals from different disciplines, including engineering. New disciplines of science, such as geophysics and biochemistry, often emerge at the interface of two older disciplines.**

*Benchmarks* The Nature of Science  
The Scientific Enterprise

Grades 9-12

Science disciplines differ from one another in what is studied, techniques used, and outcomes sought, but they share a common purpose and philosophy, and are all part of the same scientific enterprise. Although each discipline provides a conceptual structure for organizing and pursuing knowledge, many problems are studied by scientists using information and skills from many disciplines. Disciplines do not have fixed boundaries, and it happens that new scientific disciplines are being formed where existing ones meet and that some subdisciplines spin off to become new disciplines in their own right.