

A Beach is a Beach...or is it?

AAAS Benchmarks addressed by activity:

4C. Processes That Shape the Earth: Students may show more interest in the [geological] phenomena than in the role the phenomena play in sculpting the earth. So teachers should start with students' immediate interests and work toward the science....

Grades K-2:

4C. Processes that shape the earth:

- "chunks of rocks come in many sizes and shapes, from boulders to grains of sand and even smaller"
- "change is something that happens to many things"

1B. The nature of science

- ...people can often learn about things around them by just observing those things carefully...
- ...describing things as accurately as possible is important in science because it enables people to compare their observations...

1C. The scientific enterprise

- ...everybody can do science and invent things and ideas.

Grades 3-5:

4C. Processes that shape the earth

- Waves, wind, water and ice shape and reshape the earth's land surface by eroding rock and soil in some areas and depositing them in other areas, sometimes in seasonal layers.
- ...smaller rocks come from the breakage and weathering of bedrock and larger rocks. Soil is made partly from weathered rock...

1B. The nature of science

- ...scientists' explanations about what happens in the world come partly from what they observe, partly from what they think.

1C. The scientific enterprise

- ...science is an adventure that people from everywhere can take part in, as they have for many centuries.

Grades 6-8:

4C. Processes that shape the earth

- ...some changes in the earth's surface are abrupt...while other changes happen very slowly...the earth's surface is shaped in part by the motion of water and wind over very long times...

1C. The scientific enterprise

- ...scientists are employed by colleges and universities, business and industry...their places of work include offices, classrooms, laboratories, farms, factories and natural field settings.

Grades 9-12:

1C. The scientific enterprise

- ...scientists can bring information, insights and analytical skills to bear on matters of public concern...acting in their areas of expertise, scientists can help people understand the likely causes of events and estimate their possible effects...