

Consolidated Unit Benchmarks Grouped by Report Card Descriptor

3rd Grade Earth's Changes Unit

Descriptor: Understands science concepts

- Knows that things on or near the earth are pulled toward it by the earth's gravity.
- Knows that 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.
- Knows that results of similar scientific investigations seldom turn out exactly the same. Sometimes this is because of unexpected differences in the things being investigated, sometimes because of unrealized differences in the methods used or in the circumstance in which the investigation is carried out, and sometimes just because of uncertainties in observations. It is not always easy to tell which. Also understands that one reason for following directions carefully and for keeping records of one's work is to provide information on what might have caused the differences.
- Knows that scientists do not pay much attention to claims about how something they know about works unless the claims are backed up with evidence that can be confirmed and with a logical argument.
- Understands that clear communication is an essential part of doing science.
- Knows that doing science involves many different kinds of work and engages men and women of all ages and backgrounds.
- Knows that measuring instruments can be used to gather accurate information for making scientific comparisons of objects and events.
- Knows that technology extends the ability of people to change the world: to cut, shape or put together materials; to move things from one place to another.

Descriptor: Effectively uses science process skills

- Keep a notebook that describes observations made, carefully distinguishes actual observations from ideas and speculations about what was observed, and is understandable weeks or months later.
- Use numerical data in describing and comparing objects and events.
- Recognize when comparisons might not be fair because some conditions are not kept the same.
- Make sketches to aid in [describing observations and] explaining procedures or ideas.
- Sees how a model works after changes are made to it suggests how the real thing would work if the same were done to it.

Descriptor: Actively contributes to one's own learning and the learning community during science

- Willing to share reasons for findings and consider reasons suggested by others.
- Shares and takes turn in teams.
- Listens when others talk.
- Asks questions to help understand someone else's ideas.
- Willing to discuss multiple ideas before selecting one.
- Refrains from putting-down classmates.
- Works collaboratively and responsibly with team members.