

<p>Important Concepts</p> <p>Adaptations and Changes Over Time</p> <p>3-5 Level</p>	<p>Alaska Science Content Standard C1 Students develop an understanding of how science explains changes in life forms over time, including genetics, heredity, the process of natural selection, and biological evolution.</p>
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Grade Level Expectations:

The student demonstrates an understanding of how science explains changes in life forms over time, including genetics, heredity, the process of natural selection, and biological evolution by:

- [3] **SC1.1** sorting Alaskan plants and/or animals using physical characteristics (e.g., leaves, beaks) (L)
- [3] **SC1.2** describing how some traits (e.g., claws, teeth, camouflage) of living organisms have helped them survive as a species
- [4] **SC1.1** showing the relationship between physical characteristics of Alaskan organisms and the environment in which they live
- [4] **SC1.2** describing fossil evidence (e.g., casts, track ways, imprints, etc.) of extinct organisms
- [5] **SC1.1** contrasting inherited traits (e.g., flower color, number of limbs) with those that are not (riding a bike, scar from an accident)
- [5] **SC1.2** making reasonable inferences about fossil organisms based on physical evidence

According to AAAS’s Benchmarks for Science Literacy* some of the things that students should know and understand by the end of fifth grade are:

Some likenesses between children and parents are inherited. Other likenesses are learned. For offspring to resemble their parents, there must be a reliable way to transfer information from one generation to the next.

Individuals of the same kind differ in their characteristics, and sometimes the differences give individuals an advantage in surviving and reproducing.

Fossils can be compared to one another and to living organisms according to their similarities and differences.

Some organisms that lived long ago are similar to existing organisms, but some are quite different.

*Project 2061, American Association for the Advancement of Science, Benchmarks for Science Literacy. New York: Oxford University Press, 1993.