



Dinosaurs: Giants of Patagonia
IMAX® Film

Science Concepts and Corresponding State Standards

Special Note: There is a parental notice at the beginning of this film which states the large and loud 3D dinosaurs may not be suitable for younger viewers.

Science Concepts

- Using fossil evidence to understand or reconstruct the past
- Introduction to using modern descendants to understand behavior of extinct animals
- Physical adaptations
- Behavioral adaptations: living in herds, getting food, safety in numbers
- Predator/prey relationships

Standards

Washington, D.C.

- 2nd Grade
 - 2.8.3 Give examples of the many kinds of organisms that lived in the past that are now extinct and explain how these organisms were similar to, and others very different from, organisms that are alive today.
- 5th Grade
 - 5.9.5 Explain how changes in an organism's habitat are sometimes beneficial and sometimes harmful and changes in the environment have caused some plants and animals to die, migrate or become extinct.
 - 5.9.9 Examine the information that fossils provide us about living things that inhabited the earth in the distant past, and describe how they can be compared to one another and to living organisms according to their similarities and differences.
- 6th Grade
 - 6.9.7 Observe and explain that fossils provide evidence of how life and environmental conditions have changed.
- 7th Grade
 - 7.6.5 Using specific examples, explain that extinction of a species is a result of mismatch of adaption and the environment.
- Biology
 - B.5.4 Explain that biological diversity, episodic speciation , and mass extinction are depicted in the fossil record comparative anatomy and other evidence.

Maryland

- 4th Grade
 - 2.2.a, b, c Recognize and explain that fossils provide evidence about the plants and animals that lived long ago and about the nature of the environment at that time.
 - 3.D.1.d Examine and compare fossils to one another and to living organisms as evidence that some individuals survive and reproduce.
- 5th Grade
 - 3.A.1. Explain the idea that in any particular environment, some kinds of plants and animals survive well, some less well, and some cannot survive at all.
- 6th Grade
 - 3. D.1.e,f Describe ways in which changes in environmental conditions can affect the survival of individual organisms and entire species. Describe how fossils provide evidence for the long history of changing life forms whose remains are found in rocks.
- 8th Grade
 - 2.B.2. Recognize and explain that fossils found in layers of sedimentary rock provide evidence of changing life forms.

Virginia

- 3rd Grade
 - 3.4 Investigate and understand that behavioral and physical adaptations allow animals to respond to life needs.
 - 3.5 Investigate and understand relationships among organism in aquatic and terrestrial food chains.
- 4th Grade
 - 4.5 Investigate and understand how plants and animals in an ecosystem interact with one another and the nonliving environment.
- 5th Grade
 - 5.7.b Investigate and understand how the Earth's surface is constantly changing including Earth history and fossil evidence.
- Earth Science
 - ES.10 Traces and remains of ancient, often extinct, life are preserved by various means in many sedimentary rocks.
- Biology
 - BIO.8a Investigate and understand how populations change through time including evidence found in fossil records.