Maryland Standards of Learning Addressed by the IMAX® Film
SEA MONSTERS: A Prehistoric Adventure in 3D

Grade 4

Earth/Space Science
B. Earth History
2. 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.
   a) Recognize and explain that the remains or imprints of plants or animals can become fossils.
   b) Describe the physical structures of an animal or plant based on its fossil remains.

Life Science
D. Evolution
1. Explain that individuals of the same kind differ in their characteristics, and sometimes the differences give individuals an advantage in surviving and reproducing.
   b) Explain that the characteristics of an organism affect its ability to survive and reproduce.

F. Ecology
1. Explain ways that individuals and groups of organisms interact with each other and their environment.
   a) Identify and describe the interactions of organisms present in a habitat.
      • Competition for space, food and water.
      • Roles within food chains and webs; scavengers, decomposers, producers, consumers.

Grade 6

Life Science
D. Evolution
1. Explain that in any particular environment, the growth and survival of organisms and species depend on the physical conditions.
   b) Explain that in all environments organisms with similar needs may compete with one another for resources including food, space, water, air and shelter.
   f) Describe how sediments of sand and smaller particles are gradually buried and are cemented together by dissolved minerals to form solid rock; and describe that such fossils provide evidence for the long history of changing life forms whose remains are found in the rocks.

Grade 8

Earth/Space Science
B. Earth History
2. Explain how sedimentary rock is formed periodically, embedding plant and animal remains and leaving a record of the sequence in which the plants and animals appeared and disappeared.
a) Recognize how different types of fossils are formed, such as petrified remains, imprints, molds and casts.

b) Recognize and explain that the fossil record of plants and animals describes their changes over time.

Life Science
D. Evolution
1. Recognize and describe that evolutionary change in species occurs as a result of natural variation in organisms and environmental changes.
   a) Recognize and describe that gradual (climactic) and sudden (floods and fires) changes in environmental conditions affect the survival of organisms and populations.
   b) Recognize that adaptations may include variation in structures, behaviors, or physiology, such as spiny leaves on a cactus, birdcalls, and antibiotic resistant bacteria.
   c) Recognize and describe that extinction occurs when the adaptive traits of a population do not support its survival.