

Science Standards addressed by *Coastal Kingdom*



Coastal Kingdom targets K-12 South Carolina State Science Standards. Educators may use these videos as a tool to enhance student learning of scientific inquiry, life, physical, and earth science indicators.

➤ **Organisms**

- Standard K-2: The student will demonstrate an understanding of the characteristics of organisms.
- Standard 1-2: The student will demonstrate an understanding of the special characteristics and needs of plants that allow them to survive in their own distinct environments.
- Standard 2-2: The student will demonstrate an understanding of the needs and characteristics of animals as they interact in their own distinct environments.

➤ **Habitats**

- Standard 3-2: The student will demonstrate an understanding of the structures, characteristics, and adaptations of organisms that allow them to function and survive within their habitats.
- Standard 4-2: The student will demonstrate an understanding of the characteristics and patterns of behavior that allow organisms to survive in their own distinct environments

➤ **Communities**

- Standard 6-2: The student will demonstrate an understanding of structures, processes, and responses of plants that allow them to survive and reproduce.
- Standard 6-3: The student will demonstrate an understanding of structures, processes, and responses of animals that allow them to survive and reproduce.
- Standard 7-4: The student will demonstrate an understanding of how organisms interact with and respond to the biotic and abiotic components of their environment.

➤ **Ecosystems**

- Standard 5-2: The student will demonstrate an understanding of relationships among biotic and abiotic factors within terrestrial and aquatic ecosystems.
- Standard 8-2: The student will demonstrate an understanding of Earth's biological diversity over time.
- Standard B-3.6: Illustrate the flow of energy through ecosystems (including food chains, food webs, energy pyramids, number pyramids, and biomass pyramids).

➤ **Tides, weather, and seasonal changes**

- Standard K-4: The student will demonstrate an understanding of seasonal weather changes.
- Standard 2-3: The student will demonstrate an understanding of daily and seasonal weather conditions
- Standard 5-3: The student will demonstrate an understanding of features, processes, and changes in Earth's land and oceans.

➤ **Ecology**

- Standard B-6: The student will demonstrate an understanding of the interrelationships among organisms and the biotic and abiotic components of their environments.
- Standard B-5: The student will demonstrate an understanding the diversity of life.
- Standard ES-5: The student will demonstrate an understanding of Earth's freshwater and ocean systems.
- Standard ES-6: Students will demonstrate an understanding of the dynamic relationship between Earth's conditions over geologic time and the diversity of its organisms.

➤ **Scientific Inquiry**

- B-1.1: Generate hypotheses based on credible, accurate, and relevant sources of scientific information.
- B-1.2: Use appropriate laboratory apparatuses, technology, and techniques safely and accurately when conducting a scientific investigation.
- B-1.3: Use scientific instruments to record measurement data in appropriate metric units that reflect the precision and accuracy of each particular instrument.
- B-1.4: Design a scientific investigation with appropriate methods of control to test a hypothesis (including independent and dependent variables), and evaluate the designs of sample investigations.
- B-1.5: Organize and interpret the data from a controlled scientific investigation by using mathematics, graphs, models, and/or technology.
- B-1.6: Evaluate the results of a controlled scientific investigation in terms of whether they refute or verify the hypothesis.
- B-1.7: Evaluate a technological design or product on the basis of designated criteria (including cost, time, and materials).
- B-1.8: Compare the processes of scientific investigation and technological design.
- B-1.9: Use appropriate safety procedures when conducting investigations.