## Castlewood Canyon State Park School Programs

All of Castlewood's programs are correlated to Colorado Model Content Standards

## Cycles- Go- Round

Standards Correlation

- SC09 GR. 3 S.1 GLE. 1: Matter exists in different states such as solids, liquids, and gases and can change from one state to another by heating and cooling.
- SC09 GR. 3 S.2. GLE. 1: The duration and timing of life cycle events such as reproduction and longevity vary across organisms and species.
- SC09 GR. 3 S.3 GLE. 1.: Earth's materials can be broken down and/or combined into different materials such as rocks, minerals, rock cycle (sic), formation of soil, and sand some of which are usable resources for human activity.

Suggested grade levels K through  $3^{rd}$  grade. Program length is  $1\frac{1}{2} - 2$  hours.

Theme: Nature reuses and recycles everything.

## **Objectives**:

- 1. Students will be able to describe the steps of the life **cycle**: birth, growth, reproduction (bearing seeds, having babies), death, and decomposition.
- 2. Students will be able to identify living and non-living things.
- 3. Students will be able to name the three stages of the water cycle: evaporation, precipitation, and condensation.

## Home Sweet Habitat

**Standards Correlation** 

- SC09 GR. 2 S.2 GLE. 1: Organisms depend on their habitat's nonliving parts to satisfy their needs.
- SC09 GR. 2 S.2 GLE. 2: Each plant or animal has different structures or behaviors that serve different functions.

Suggested grade levels:  $3^{rd} - 6^{th}$ Program length is 2 - 2½ hours.

**Theme:** Plants and animals cannot survive without a suitable **habitat** (home.)

## **Objectives**:

1. Students will be able to define **habitat** and ecosystem. They will know the basic requirements of a home. It must provide food, water, shelter, and space in a suitable arrangement.

## (Home Sweet Habitat cont'd)

- 2. Students will be able to identify and describe at least three different **habitats** and the animals that would live in them. They should understand that since animals are different sizes and eat different things, there are many different types of **habitats**.
- 3. Students will understand that animals develop special **adaptations** to their **habitats** that increase their ability to survive there, and frequently limit their ability to survive elsewhere.
- 4. Students will be able to describe ways that they can protect wildlife habitat.

## Rock –n– Roll

### Standards Correlation

- SC09 GR.3 S.3 GLE.1: Earth's materials can be broken down and/or combined into different materials such as rocks, minerals, rock cycle (sic), formation of soil, and sand some of which are usable resources for human activity.
- SC09 GR.5 S.3 GLE. 2: Earth's surface changes constantly through a variety of processes and forces.
- SC09 GR.6 S.3 GLE. 1: Complex interrelationships exist between Earth's structure and natural processes that over time are both constructive and destructive.

Suggested grade levels:  $3^{rd} - 8^{th}$ Program length is 2 - 2½ hours.

**Theme:** Rocks and minerals are almost always in motion, always changing – even though we may not perceive the changes in our lifetime.

## **Objectives:**

- 1. Students will be able to identify and explain the differences between **igneous**, **metamorphic** and **sedimentary** rocks.
- 2. Students will be able to identify and describe at least two geologic processes that are occurring in the canyon. (e.g. **erosion** and beaches deposited by the stream)
- 3. Students will be able to describe the forces that created the Castle Rock Conglomerate and rhyolite.

## Webs of Life

#### Standards Correlation

• SC09 – GR.4 – S.2 – GLE.3: There is interaction and interdependence between and among living and nonliving components of systems.

Suggested grade levels:  $3^{rd} - 8^{th}$ Program length is 2 - 2½ hours.

Theme: Everything is interconnected in an ecosystem.

**Objective**: Discover the four different ecosystems of Castlewood Canyon. We will exercise our powers of observation while we examine the building blocks of each of the ecosystems and learn how they are interdependent.

## (Webs of Life cont'd)

Goals:

- 1. Students will be able to name the four different ecosystems (grassland, montane shrubland, montane forest, riparian) in CCSP.
- 2. Students will be able to compare and contrast the plants and animals of the four ecosystems.
- 3. Students will be able to describe how the plants and animals of each ecosystem are interconnected through food webs (interlocking food chains.)

**Cherokee Trail** 

## **Standards Correlation**

- SS09 GR.4 S.1 GLE.1: Organize and sequence events to understand the concepts of chronology and cause and effect in the history of Colorado.
- SS09 GR.4 S.1 GLE.2: The historical eras, individuals, groups, ideas and themes in Colorado history and their relationship to key events in the United States.
- SS09 GR.4 S.2 GLE. 2: Connections within and across human and physical systems are developed.

Suggested grade levels:  $3^{rd} - 8^{th}$ Program length is 2 - 2½ hours.

### Goals:

- 1. Students will learn about living and traveling in nature
- 2. American History
  - Review of Homesteading
  - Western Expansion Settlement of new Territories
  - Lifestyles and Careers in the latter 1800s

While hiking, students will simulate a 19<sup>th</sup> century wagon train trip. They will need to make decisions about money, provisions, stock and route while attempting to "survive."

## **Skins and Skulls**

Note: This is an indoor program, however a short hike after the indoor portion is possible.

### **Standards Correlation**

• SC09 – GR.2 – S.2 – GLE.2: Each plant or animal has different structures or behaviors that serve different functions.

Suggested for all grade levels Program length is 1 - 1½ hours.

### Goals

- 1. Participants will able to recognize characteristics in skulls and skins that give clues to the identity and behavior of these animal inhabitants of Castlewood Canyon.
- 2. Participants will be able to distinguish between predators and prey using skull characteristics and dentition.

# Grade Level, Standard, & Recommended Program

Grade	State Standard	Recommended Program
Preschool	Physical education: Physical and Personal Wellness. Prevention and Risk Management.	**Nature Appreciation Hike
Kindergarten	Physical education: Physical and Personal Wellness. Prevention and Risk Management.	**Nature Appreciation Hike
1 <sup>st</sup>	1. Science; Life	<ol> <li>Skins &amp; Skulls (short version)</li> <li>**Nature Appreciation hike</li> </ol>
2 <sup>nd</sup>	1. Science; Life	1. Skins & Skulls, plus Nature hike 2. Home Sweet Habitat
3 <sup>rd</sup>	1. Science; Life 2. Science; Earth	1. Cycles- Go- Round 2. Rock-n-Roll
4 <sup>th</sup>	1. Science ; Life 2. Social Studies; History	<ol> <li>Webs of Life</li> <li>Cherokee Trail</li> </ol>
5 <sup>th</sup>	1. Science; Earth	1. Rock – n– Roll
6 <sup>th</sup>	1. Science; Earth	1. Rock – n– Roll
7 <sup>th</sup>	No direct Standards correlation, but best fit is Science Standard.	With Adaptations: 1. Rock – n- Roll 2. Home Sweet Habitat 3. Skins and Skulls
8 <sup>th</sup>	No direct Standards correlation, but best fit is with Life Science Standard.	With considerable adaptations: 1. Webs of Life
High School	No direct Standards correlation, but best fit is with Life and Earth Science Standards.	With considerable supplementation: 1. Rock –n- Roll 2. Skins & Skulls

KEY:

SC09 – GR.5 – S.2 – GLE1: Content area & year adopted – Grade level – Standard – grade level expectation