

Life of Pika

EarthGames Teacher's Guide



Overview

Life of Pika is an interactive, educational game focused on the life of a pika on its mission for survival in the Cascades through threats of climate change and various predators. Throughout the game, Life of Pika provides players ages 8+ with facts about pikas, and the alpine regions which they call home. The game takes approximately 15 minutes to play through and can be played both in single and double player with another student.

As a crucial species in alpine regions, the life of the endearing pika is far from easy. As a non-migratory animal, Pikas are on a constant mission for food and protecting their territory as they prepare for winter hibernation. Through this game, players must evade pikas' predators; foxes, weasels, and hawks. However, beyond these challenges, pikas are also threatened by climate change, as they need shady areas to cool off as they run and forage for food all day. With climate change there are also fewer suitable places for them to live in their historic habitats, and they are forced to gather food at increasingly lower altitudes.

The player is taken through the daily journey of the pika and must act swiftly and carefully to evade predators and stay cool in a warmer climate. As players go through each chapter of the game, they learn new facts about pikas, climate change, and alpine ecosystems like those of the Cascades.

Objective

Gather grasses and flowers for food while avoiding the hot sun and attacks from predators to safely return to your pika colony high on the mountain.

Learning Goals

Students will be able to learn about alpine food webs through the daily journey of a primary consumer, the pika. Additionally, students are exposed to the workings of an alpine ecosystem, and the threats climate change is posing to pikas in these environments.

Next Generation Science Standards

Students who demonstrate an understanding can:

1. **5-LS2-1:** Develop a model to describe the movement of matter among plants, animals, decomposers, and the environment.
2. **3-LS4-3:** Construct an argument with evidence that in a particular habitat some organisms can survive well, some survive less well, and some cannot survive at all.
3. **K-LS1-1:** Use observations to describe patterns of what plants and animals (including humans) need to survive.
4. **K-ESS3-1:** Use a model to represent the relationship between the needs of different plants and animals (including humans) and the places they live.