Winter Adaptations: Coping with the Cold  
Season: Winter  Grades: 2-5  Length: 1 – 1½ hours

Colder temperatures and shorter days bring about many changes in the world around us. Students explore forest life through observation and exploration to discover the ways plants and trees adapt to winter's challenges. They also examine the familiar black-capped chickadee to discover its remarkable survival strategies and complex language of calls. Weather permitting, students take a close look at the unique designs of snowflakes and examine the processes that form them. BIG IDEAS: Structure and Function; Cycles; and Interdependence.

Next Generation Science Standards Addressed:

**Second Grade**
2-LS4-1. Make observations of plants and animals to compare the diversity of life in different habitats.

**Third Grade**
3-LS1.B Reproduction is essential to the continued existence of every kind of organism. Plants and animals have unique and diverse life cycles.
3-LS2-1. Construct an argument that some animals form groups that help members survive.
3-LS3-2. Use evidence to support the explanation that traits can be influenced by the environment.
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-LS4-4. Make a claim about the merit of a solution to a problem caused when the environment changes and the types of plants and animals that live there may change.

**Fourth Grade**
4-LS1-1. Construct an argument that plants and animals have internal and external structures that function to support survival, growth, behavior and reproduction.
4-LS1.A Structure and Function Plants and animals have both internal and external structures that serve various functions in growth, survival, behavior, and reproduction.
4-LS1.B Reproduction is essential to the continued existence of every kind of organism. Plants and animals have unique and diverse life cycles.

**Fifth Grade**
5-PS3-1. Use models to describe that energy in animal’s food was once energy from the sun.
5-LS1-1. Support an argument that plants get the materials they need for growth chiefly from air and water.