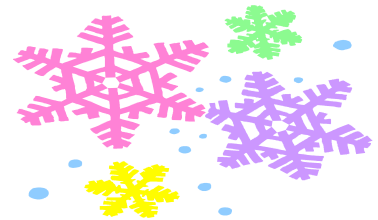


A Long Winter's Nap



Background:

Animals are preparing for winter. Some hibernate, some migrate, and others are active.

Challenge:

Design and build a hibernating animal and its home. Show how it enters its home to prepare for winter and how leaves the home when spring arrives. Your animal should be able to move on its own to get in and out of its home.

Criteria:

- ❑ Your design must have a pneumatic system.
- ❑ A lever should be included.
- ❑ The hibernating animal must resemble the real animal.
- ❑ You must include a home for the animal.
- ❑ The completed design must fit on your desktop.

Materials You may choose from the materials below.	Tools You may use the tools listed below.
<ul style="list-style-type: none"> • boxes • cardboard • craft sticks • toilet paper tubes • brads • construction paper • straws • syringes • plastic tubing • balloons • glue • tape • paper clips • tooth picks • dowel rod 	<ul style="list-style-type: none"> • pencils / colored pencils • hole punch • scissors • markers • ruler • push pin <p>With adult supervision:</p> <ul style="list-style-type: none"> • hand drill • paper drill • glue gun



Virginia Standards of Learning

Focus SOL's:

Science: Earth Patterns, Cycles, and Change

- 1.7 The student will investigate and understand the relationship of seasonal change and weather to the activities and life processes of plants and animals. Key concepts include how temperature, light, and precipitation bring about changes in:
 - b) Animals (behaviors, hibernation, migration, body covering, and habitat)
- 2.7 The student will investigate and understand that weather and seasonal changes affect plants, animals, and their surroundings. Key concepts include:
 - a) Effects on growth and behavior of living things (migration, hibernation, camouflage, adaptation, dormancy)

Supporting SOL's:

Oral Language:

- 1.1 The student will continue to demonstrate growth in the use of oral language
 - d) Express ideas clearly
- 1.2 The student will continue to expand and use listening and speaking vocabularies
 - a) Increase oral descriptive vocabulary
 - b) Begin to ask for clarification and explanation of words and ideas
 - c) Follow simple two-step oral directions
 - d) Give simple two-step oral directions
 - e) Use singular and plural nouns
- 1.3 The student will adapt or change oral language to fit the situation
 - a) Initiate conversation with peers and adults
 - b) Follow rules for conversation
 - c) Use appropriate voice level in small-group settings
 - d) Ask and respond to questions in small-group settings
- 2.1 The student will demonstrate an understanding of oral language structure.
 - c) Use correct verb tenses in oral communication.
 - d) Use increasingly complex sentence structures in oral communication.
- 2.2 The student will continue to expand listening and speaking vocabularies.
 - a) Use words that reflect a growing range of interests and knowledge.
 - b) Clarify and explain words and ideas orally.

Technology:

- C/T K-2.6 The student will use technology resources for solving problems and making informed decisions.
- Recognize that technology can be used to solve problems and make informed decisions.
 - Identify and select technologies to address problems.