

ST. TIKHON OF THE TAIGA RELATED RESOURCES

EXPERIMENTS

Polar Plunge

In this experiment, we test out an arctic adaptation: blubber, which helps keep animals in the taiga warm.

Materials:

- Ice
- Water
- Spoon or spatula
- Bowl (large enough to stick a hand in)
- Plastic bag or latex gloves
- Lard

Procedure:

- Fill a bowl with ice and water.
- On one hand, place a glove or sandwich bag.
- On the other hand, place a glove or sandwich bag. Then, use a spoon or spatula to cover your bagged hand with lard. Cover the larded hand with another bag or glove.
- Place the single bagged hand into the ice water. Then the larded hand. Record your observations!

Pinecone Weathervane

In this experiment, we explore how pinecones scales expand and contract with temperature and humidity!

Materials:

- Pinecone (hard-scaled works best)
- String

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Procedure:

- Tie a string around the top of your pinecone.
- Hang the pinecone outside, and monitor how open (or closed) the scales appear over 48 hours.
- How does it react to warm, dry weather? What about rainy weather? Note these changes in your lab notebook!

Toughest in the Taiga

In this experiment, we take another look at coniferous trees to see what extreme conditions they can brave.

Materials:

- 3-4 segments of coniferous tree branches
- Tap water
- Other liquids of your choice
 - Examples: vinegar, oil, coffee, salt water, lemon juice
- 3-4 cups or mason jars

Procedure:

- Fill your cups $\frac{1}{4}$ of the way with your desired liquids. Be sure to label them.
- Place the cut end of your coniferous tree branch into the liquid. Let sit for 10 days. Take note of the results! What liquids could the branch not tolerate?

CRAFTS

Hare-y Portraits

Ever wonder what you might look like as a hare? Using an egg carton and some art supplies, you can make your very own hare-raising portait!

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Materials:

- 1 egg carton
- Scissors
- Cardboard
- Glue
- Colored pencils, markers, paints, etc...

Procedure:

- Cut out the rounded parts of the egg carton to make the hare's head. Cut the flatter parts into ear shapes.
- Glue the head and ears down onto the cardboard frame.
- Decorate the hare head and frame with any art supplies of your choosing!

Pine Needle Ornaments

Turn fallen pine needles into fragrant keepsake ornaments!

Materials:

- Pine needles
- Air dry clay
- Twine
- Rolling pin
- Mod Podge
- Cookies cutters
- Pencil or chop stick

Procedure:

- Roll out the air dry clay with a rolling pin, and cut out your desired shapes with a cookie cutter.
- Press pine needles into the clay.
- Poke a hole in the top of the ornaments with a pencil or chopstick, where twine will be threaded when they are dry.

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- Seal the ornament with a layer of mod podge. Allow 1-2 days to dry.
- Thread with twine and tie at the top. Now they are ready to hang!

SNACKS

Edible Pinecones

Indulge in the crunchiness of a pinecone, with the obvious mouth damage and inedibility!

Ingredients (8 servings):

- 3 Tbsp butter, softened
- ½ cup peanut butter
- ⅓ cup Nutella
- 1 cup powdered sugar (plus extra for dusting)
- 8 strawberries
- 8 stick pretzels
- 4 cups chocolate Chex cereal

Directions:

- Combine the butter, peanut butter, Nutella, and powdered sugar. It should form a dough.
- Stick a pretzel stick through the center of each strawberry to form the pinecone base.
- Mold your dough around the strawberry-pretzel structure.
- Stick the pieces of chocolate Chex into the dough, starting with larger pieces at the bottom, and working your way up with smaller and smaller pieces.
- If desired, you can trim the tip of the pretzel off.
- Dust with powdered sugar and enjoy!

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BOOKS

Orthodox

Title: North Star: St. Herman of Alaska

Author: Dorrie Papademetriou

Summary: The story of St. Herman, who evangelized to the people of the taiga.

Grade Level: 1 - 3

Scientific

Title: Our Wild World Ecosystems: The Arctic

Author: Wayne Lynch

Summary: Crossover section about the low Arctic, discussing animals and their winter adaptations.

Grade Level: 3 - 6

Title: Rookie Read-About Science: How Do You Know It's Winter?

Author: Lisa M. Herrington

Summary: Simple book about the habits of plants, animals, and people during the winter. Includes experiment.

Grade Level: 1 - 2

Title: Earth's Natural Biomes: Tundra Biomes

Author: Louise and Richard Spilsbury

Summary: In-depth look at the tundra and similar environments. Focused on adaptations and habits of people and animals of the tundra.

Grade Level: 3 - 6

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BOOKS

Title: DK Eyewitness Books: Tree

Author: David Burnie

Summary: Overview of different types of trees, as well as how to identify and care for them.

Grade Level: 3 - 6

SONGS

Title: Animals in Winter: Animal Adaptations Song

YouTube Channel/Artist: ericchandler7808

Link: <https://youtu.be/tIKOFNCkxmQ?feature=shared>

Title: Taiga/Boreal Forest Song

YouTube Channel/Artist: quantumshock5049

Link: https://youtu.be/gT2rhay-x_g?si=Hut1AG7Z8k14dh5b

Title: Peter on the Water

YouTube Channel/Artist: Gigi Baba Shadid

Link: https://youtu.be/X_TRgq_EoEg?si=JB7AzwR5f1GAKGWd