

# **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

# ST. TIKHON OF THE TAIGA RELATED RESOURCES

## 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!

# ST. TIKHON OF THE TAIGA RELATED RESOURCES

## 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.

# ST. TIKHON OF THE TAIGA RELATED RESOURCES

- 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!

# ST. TIKHON OF THE TAIGA RELATED RESOURCES

## 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

# ST. TIKHON OF THE TAIGA RELATED RESOURCES

## 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](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](https://youtu.be/X_TRgq_EoEg?si=JB7AzwR5f1GAKGWd)