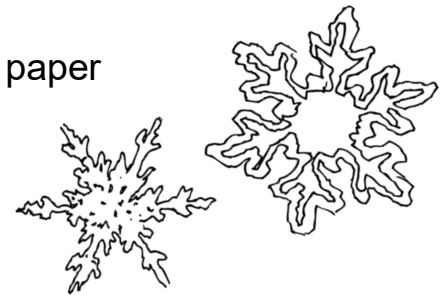


Part A Supplies

- 5 clear plastic containers (at least 8 oz)
- Small piece of newspaper (about a 1-in square)
- A piece of bread
- Small whole fruit like a strawberry or blueberry
- Small metal object like a nail or paper clip
- Small leaf or flower
- Tweezers
- Pebbles
- Pencil
- Sheet of paper



Part B Scientific Concepts

In extremely cold environments such as Siberia, Ice Age animals like woolly mammoths have been found frozen with more than just their skeletons intact. Discoveries like these are valuable to the scientific community because they contain samples of blood, fur, skin, or other soft tissue that would have otherwise decomposed. Paleontologists can learn much about the biology—the life, diet, behavior, habitat, etc.—of

these extinct animals from their preserved remains.

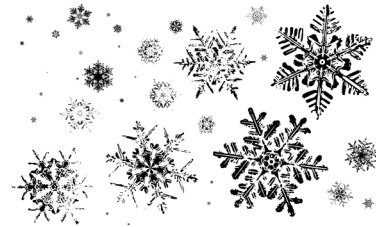
Ice can preserve something for tens of thousands of years—but as soon as it thaws, it must be rescued quickly and put in a special climate-controlled location to prevent it from degrading. This activity shows both how ice can be a preservative and also how fast something degrades if left exposed.



Junior at Home Preservation In Ice

Part C Instructions

1. On the sheet of paper, write down the condition of the newspaper, bread, small fruit, metal object, and leaf. Keep the paper—you'll need it again later.
2. Put each of the five objects in a container and fill each about 3/4 full with water.
3. If any of the objects float to the surface, place pebbles on them so they sink back down. Then, put them in the freezer.
4. After 4-6 days, take the containers out of the freezer and let them defrost.
5. Carefully remove the objects with the tweezers. Discard the pebbles and dump out the water.
6. What conditions are the objects in now? Have any of them changed? Write down your findings and compare them to what you wrote earlier.
7. Without drying off any of the objects, put them back in their containers and place them in a warm, dry, bright place. After another 4-6 days, record their condition once more. How do they look now, compared to when they were frozen?
8. What do your results tell you about what types of things might be preserved well in ice? What do they tell you about what happens after things are defrosted?



Activity adapted from *Archaeology for Kids* by Richard Panchyk, Chicago Review Press, Inc., 2001.

Part D Virtual Troop Meeting Ideas



Text or voice chat. Have your Girl Scouts complete steps 1-7 on their own. Then, have them compare their results and answer step 8 together.

Voice chat and group listen. Ice Age animals aren't the only things found frozen in ice—sometimes, people are found too! Have your Girl Scouts brainstorm what

artifacts might be found with an ice mummy, and what they might help archaeologists understand. Then, listen to [this podcast](#), which tells a story of how archaeology, botany, and forensics helped reconstruct the last days of one such ice mummy, 5,300-year-old Ötzi. It is 20 minutes long but well worth the time if your troop is interested!