



# Bocas ARTS



## How to Make Ice Sections

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1. Observe and cut a piece of sponge under a dissection microscope to confirm its quality
2. Cut a 1-2 cubic centimeter piece of the sponge to include the outer surface and interior of the specimen.
3. Place the cut piece into an ice cube tray and cover with freshwater.
4. Place the tray into the freezer for at least one hour, but overnight is often better.
5. After the ice cube has frozen, release the cube from the tray.
6. Carefully cut the ice cube with a razor blade until the specimen is reached.
7. Using a shaving motion, hand-cut thick sections (0.2 to 0.5 mm thick) from the surface to the interior of the specimen.
8. Check the quality of the sections with a microscope by placing them on a microscope slide with a drop of water and a coverslip.
9. To make a permanent mount, dehydrate the sections through a series of ethanol, moving from 80%, 90%, to 100% ethanol, for 5 minutes each.
10. Repeat dehydration in 100% ethanol two additional times, for 5 minutes each.
11. Place the dehydrated sections on a glass slide and add a drop of toluene, xylene, or another clearing agent, such as CitriSolv.
12. Allow the clearing agent to evaporate under a hood.
13. Add a few drops of Permount or Canada Balsam mounting medium.
14. Dip one side of a coverslip into the clearing agent, then place that side over the mounting medium.
15. The mounting medium will take 2 to 3 days to dry. Place it on a heating plate (set to low heat) to accelerate drying.