



AMAZING ANIMAL ARCHITECTURE: WASP NESTS

Make your own wasp nest building material.

Materials

Recycled paper or newspaper
A bowl
Warm water
Wax paper
Towel

Procedure

- Take your recycled paper and tear it up into nickel-sized pieces. Place those pieces in the bowl and pour in warm water until the paper is covered. Let the paper sit for an hour before continuing.
- Use your hands to tear the soaked paper into tiny pieces. You can use a spoon to further break up the paper until you have a thick paste. If you have a blender you may also blend the paper for a smoother texture.
- Scoop up a handful of paper pulp and squeeze the water out by pressing the pulp between your hands. Lay this onto a piece of wax paper. Add as much pulp as you want and then spread the pulp into a thin layer.
- Place the towel over your pulp and firmly press to absorb as much water as you can. Remove the towel and place your pulp, still on the wax paper, in a sunny place to dry. Drying times may vary.
- When your paper is dry and firm, gently peel it off the wax paper. You've now made your own paper just like some wasps do! You may try the experiment again or you can make something out of your handmade paper.

Results

You've made your own paper!



Why?

Paper wasps, yellowjackets, and hornets all make nests out of paper. They make their own paper for building by turning raw wood into paper pulp. When a wasp queen is ready to start her nest, she uses her strong jaws to scrape off and chew tiny pieces of wood called fibers. She adds in her own spit to break down the fibers until they form a soft paper pulp. She can then use this pulp to create the hexagonal cells for her nest. As the pulp dries, it forms a sturdy paper nest where the queen can raise her young. Future worker wasps can also create paper pulp to add to the nest.