DIY: DEEP-SEA BUBBLEGUM CORAL

(*Paragorgia arborea*)

The common name for *bubblegum coral*, a soft coral mostly found in cold water, comes from the bundles of polyps at the end of the branches that resemble a wad of bubble gum. *Bubblegum coral* is a branching *gorgonian fan* seen on the seafloor at depths of 200-1,300 meters (650-4,200 feet) and can grow up to a height of 6 meters (20 feet)!

Beyond their beauty, deep-sea corals, such as the *bubblegum coral*, provide a unique window for *UC Santa Cruz scientists* to better understand the rapidly changing oceans. The coral’s organic (hard, protein-based) skeletons contain a detailed record of past changes of *carbon* and nutrient cycling.

Using materials found around the house, build a deep-sea *bubblegum coral* (*Paragorgia arborea*) replica!
ITEMS NEEDED:

- Craft wire (alternative: pipe cleaners)
- Wire cutters or scissors
- Pink washable paint (or choose any color you want!)
- Paintbrush
- Hot glue gun and extra glue sticks
- Glass baking dish or container
- Small piece of wood or a sturdy base structure

*If needed, please ask an adult for assistance when using the wire cutters or scissors, hot glue, and paint!

STEP ONE: Using the wire cutters or scissors, cut 12-18 pieces of craft wire at 6-10 inches in length.

STEP TWO: Bend a piece of cut craft wire into a “V-shape.” Place into a glass container.
**STEP THREE:** Avoiding the bend in the craft wire, carefully add hot glue around the craft wire. *(Tip: Add hot glue at a slow and steady pace to prevent the glue from falling off the wire. It is okay if the glue looks “globby” or “clumpy.” The more irregular the glue, the better!)*

![Image of adding hot glue to craft wire.](image1)

Add glue between the red arrows

**STEP FOUR:** Once the hot glue on the craft wire has dried, carefully lift the craft wire out of the glass container. *(Tip: Use a spatula or a paint peeler if the craft wire is firmly stuck.)* Paint the hot glue. Set aside to dry. You have created a “coral branch.”

![Image of lifting craft wire and painting hot glue.](image2)

**STEP FIVE:** Repeat steps two through four to create a total of three painted “coral branches.”

![Image of three coral branches.](image3)
**STEP SIX:** Stack the three painted “coral branches” so all of the bends in the “V-shapes” are almost touching.

**STEP SEVEN:** Twist a separate piece of craft wire around the touching bends of the “coral branches.” Place a thimble-sized amount of hot glue at the connection point. You have created a “coral tree.”

**STEP EIGHT:** Repeat steps two through seven to create a total of three “coral trees.”
**STEP NINE:** Twist the exposed wires at the bottom of the three “coral trees” to connect together. Add hot glue to the twisted wires for extra support. You have created coral!

**STEP TEN:** Glue the twisted and exposed wires of the coral to a block of wood or a sturdy base structure. Let dry. (*Tip: Add a generous amount of hot glue for a strong coral base.*)

**STEP ELEVEN:** Paint the base once the hot glue is dry. Enjoy your deep-sea bubblegum coral replica!

**HAPPY HALLOWEEN!**