Recycled Jellies

Learn the anatomy of one of nature's most fascinating creatures (art + science)

Jellyfish are found in every ocean, all over the world. They are considered the oldest multi-organ animals, and with tentacles measuring up to 120 feet long, they are the longest animals in the world. Their unique anatomy and living habits make them one of the most interesting creatures to observe. Because they are not actually fish, many aquariums and scientists now use the term "jellies" or "sea jellies," as they feel it is more accurate.

To learn all about jellies, students can make their own sparkling, colorful models using some of the very materials that threaten their habitat — plastic bags and fast food containers. Display them together for a classroom "bloom" or swarm of jellies.

GRADES K-5 *Note: instructions and materials are based upon a class size of 25 students. Adjust as needed.*

Preparation

Before beginning the process of making a jellie, learn about what makes them so unique. There's no digestive, central nervous, respiratory, or circulatory systems — so what is there to a jellie?

1. The main part of the adult's body is called many things: bell, bowl, hood, medusa, dome, and more. It contracts to make the jellie move. The jellie's mouth hangs down from beneath the bell and is surrounded by arms that draw in food. Surrounding the arms and hanging from the edge of the bell are sticky tentacles that the jellie uses like a net to capture food. The tentacles are lines with stinging cells that inject venom. Some jellies also have eyes or organs that are sensitive to light changes.
2. Save plastic dome lids from coffee drinks, ice cream, or salads (one for each jellie).
3. For tentacles, cut pieces of Britelace approximately 15" long (four for each jellie).
4. For the jellie's arms, use clear plastic sheeting or unprinted bags. Cut into pieces 11" x 14" or larger and make as flat as possible.
5. Cut iridescent film into 6" x 18" pieces to use for the jellie's mouth.

Process

1. The bell of the jellie is made from a recycled dome lid. Punch eight holes around the dome. If there isn't a hole in the top of the dome, punch one.
2. Mix Glitter Glaze in a painting cup with a small amount of Liquid Watercolor to tint. Paint the plastic dome on the outside and also paint the plastic sheet or unprinted plastic bags. The glaze may be thinned with water to extend. Allow to dry.

Materials

Sargent® Glitter Glaze, 32-oz (00704-1007); share one among class

Blick® Liquid Watercolor, 8-oz assorted colors (00369-); share at least one color among class

Rexlace® Britelace, 50-yd Silver Holographic (61533-9330); share one spool among class

Richeson® Paint Cups, package of 100 (03317-0100); share one among class

Lolli-Foam™ Brush, package of 12 (05123-1009); share two packages among class

Fiskars® Hand Punch, 1/4" circle (58923-1003); share 3-4 among class

Westcott® KIDS Non-Stick Scissors with Microban® Protection (57615-5105); share 5-6 among class

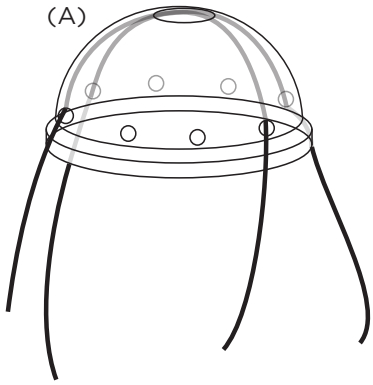
Iridescent Film, 36" x 12.5-ft roll (11209-1036); share one among class

Beadalon® Supplemax™ Illusion Cord, 30-lb, 50m spool (60637-1030); share one among class

Step 1: *Gather recycled plastic dome lids and punch holes around their edges.*

Step 2: *Paint the plastic dome with a mixture of Glitter Glaze and Liquid Watercolor. Allow to dry.*

Step 3: *Thread BrightLace through the punched holes on dome lid for tentacles.*



Step 4: *Tear plastic sheet into strips and glue inside the dome for arms. Glue iridescent film inside the dome to create the jellie's mouth.*

Step 5: *Attach a string through top of the dome for hanging.*

Process, continued

3. Thread Britelace pieces through the punched holes on the dome lid, so that the ends extend outside and the lace fits inside the dome, (see Illustration A).
4. Keeping a 2" margin at the top, tear strips in the plastic sheet or unprinted plastic bags to form arms. The plastic may crinkle and buckle as it's torn and the arms may not be uniform in length — this will enhance the natural look.
5. Use a clip or wire tie to temporarily bind the Brightlace tentacles above the dome and out of the way. Apply glue generously to the inside of the dome, right over the lacing. Press the plastic arms into the glue.
6. Fold the iridescent film in half so it measures 9" x 6". Apply more glue inside the dome, this time to the inside of the plastic arms. Press the iridescent film into the glue, allowing it to bunch and crinkle. This forms the mouth area.
7. Allow to dry overnight. Attach clear cord to Brightlace through the hole in the top of the jellie's bell, and hang.

National Standards for Visual Arts Education

Content Standard #2 — Using knowledge of structures and functions.

K-4 Students describe how different expressive features and organizational principles cause different responses.

5-8 Students generalize about the effects of visual structures and functions and reflect upon these effects in their own work.

Content Standard #6 — Making connections between visual arts and other disciplines

K-4 Students identify connections between the visual arts and other disciplines in the curriculum.

5-8 Students describe ways in which the principles and subject matter of other disciplines taught in the school are interrelated with the visual arts