

## Chime in with Nature!

Swaying “leaves” create a melodious kinetic sculpture.

Wind chimes have been a standard addition to a garden space, dating all the way back to ancient Rome, India, and China. Early wind chimes were made from hanging small bells, so that a slight breeze would create melodious, if random, tinkling sounds. These early wind chimes were hung not merely for their decoration, but to ward off evil spirits with their lightly jingling sound. They were also effective at keeping birds away — making their placement in gardens and courtyards an effective way to protect sprouting seedlings.

Creating something that looks like a wind chime is quite easy, but there are other considerations than aesthetics at play. The chime must be able to produce a pleasant sound as well. This is achieved by using a material that will reverberate when struck. Traditionally, wind chimes are circular in their construction, while the term “chime tree” denotes a linear construction.

With a little bit of sculpture wire, canvas, and plaster it's easy to create a masterful wind chime or chime tree that sounds as beautiful as it looks. Students will learn to play with balance and counterbalance to create a kinetic sculpture that functions as an aesthetically pleasing chime. You won't believe your eyes ... or ears!

### GRADES 5-12

Note: Instructions and materials are based upon a class size of 24 students. Adjust as needed.

### Preparation

1. Cut various lengths of sculpture wire, from 4" to 8".
2. Cut canvas into sections measuring 18" x 30". Each student will need at least one piece.
3. Observe images of various types of wind chimes.

### Process

1. Finished plaster leaves can be any size, but, as a guide, a template is provided on page 3. An easy method for producing multiple canvas leaves at once and saving on cutting time is to stack 3-4 small pieces of canvas, trace the template onto the top piece, and cut. Cut as many leaf shapes and sizes as desired.
2. Select a piece of wire appropriately sized to the leaf. Use the pliers to grip the end of the sculpture wire and twist it to make a loop.
3. Fold the canvas in half the long way, and make small cuts at 1" intervals along the folded side.



### Materials

**Densite Plaster**, 25 lb (33537-1025); share one bag across class

**Blick Plaster Cloth**, 4" x 6-1/2 yds, package of 4 (34134-2500); share one roll among six students

**Creativity Street Craft Sticks**, natural, bag of 150 (60401-1500); share one between two students

**Blick Armature and Sculpture Wire**, 14 gauge, 350 ft (33400-1435); share one spool across class

**Brass Wire**, 28 Gauge, 75 ft (33412-1075); share five spools across class

**Pepperell Brass Plated Macramé Rings**, assorted sizes (65292-); one per student

**Aleene's Clear Gel Tacky Glue**, 4 oz (23884-1204); share five across class

**Beadalon Econo Flat/Round Pliers**, (60671-1010); share one between two students

**Blick Liquid Watercolors**, assorted colors, 118 ml (00369-); share at least three bottles across class

**Blick Cotton Canvas by the Yard**, Unprimed, 12 oz, 60" x 1 yd (07334-1260), share six yards across class

**Small disposable plastic bowl**, share one between two students

### Optional Materials

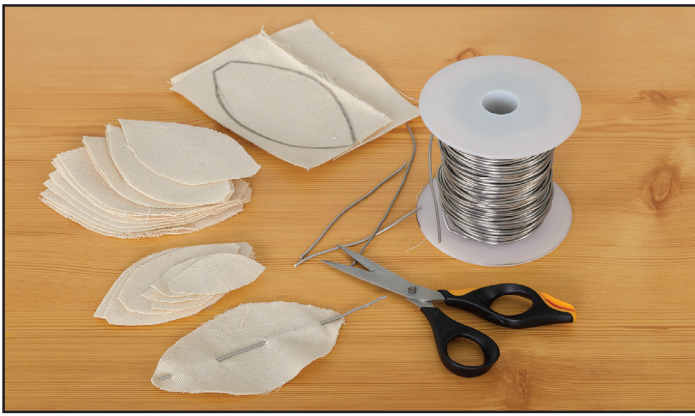
**Richeson Collegiate Semi-Moist Watercolor**, assorted colors, set of 12 (01679-); share five sets across class

**Trimaco SuperTuff Plastic Drop Cloth**, 9" x 12 ft (04519-1912)

**Beadalon Supplemax**, 0.25 mm, 8 lb, 50 m (60637-1008)

**Decorative beads**

**Found sticks and twigs of various sizes**



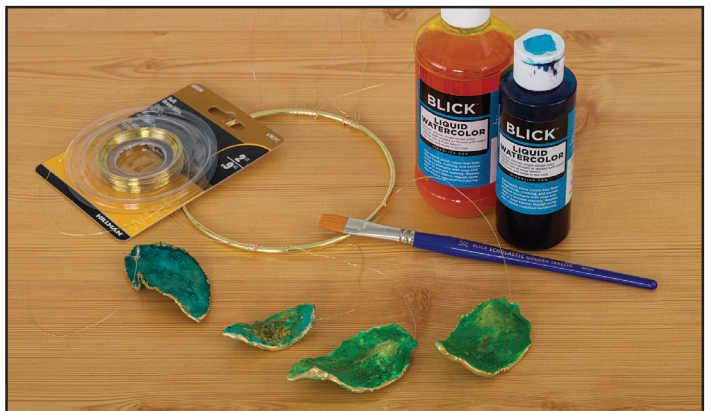
*Step 1: Cut leaf shapes from canvas and thread sculpture wire through the center.*



*Step 2: Cover wire with plaster cloth.*



*Step 3: Dip leaves into plaster, smoothing over with a finger. Hang to dry.*



*Step 4: Paint leaves and arrange onto support using thin wire or clear string.*

### Process, continued

4. Unfold the leaf. Starting at the wide end of the leaf, and holding the wire at the looped end, weave the wire in and out of the canvas, poking through the holes made in the center. Cut any excess wire from the end. Repeat for all leaves.
5. Bend the wire to mimic a natural leaf shape.
6. Cut plaster strips into an assortment of small triangles. Dip plaster strips one piece at a time into a bowl or cup of water, activate the plaster by rubbing the cloth gently between fingers. Cover the opening in the canvas where the wire was threaded through with dampened plaster cloth. This will essentially act like a tape, keeping the wire in place when the plaster sets. Repeat, covering all cut openings on all of the leaves. Place the leaves on a plastic drop cloth or newsprint to dry.
7. Start mixing plaster. Share one bowl between two students. Begin by mixing one cup of plaster, slowly adding cold water. Using cold water will help slow down the setting of the plaster, allowing for a longer working time. Slowly stir, until the mixture is the consistency of heavy cream and all lumps have disappeared. Additional batches of plaster can be mixed as needed in the following steps. It is best to mix multiple small batches, as it will harden quickly. If the plaster hardens in the bowl simply tap it out over a trash can to clean it out and use again.
8. Holding the leaf at the wire loop end, dip it into the plaster. Gently shake off excess plaster over the bowl. Smooth over any uncovered areas with a finger or craft stick.
9. To dry, hang the plaster leaves on a clothesline positioned over a drop cloth or newsprint so that excess plaster can drip off.
10. When all leaves are dry they can be painted with watercolor and attached to the macramé ring with the brass wire. Be sure each component is positioned so if it is moved it will strike another and make a light tinkling noise.
11. When completely satisfied with the arrangement of leaves, place a small drop of Aleene's Clear Gel Tacky Glue at the connection point to the ring.

### Options

- Use found materials, such as a large stick, instead of a macramé ring as the hanging structure.

## National Core Arts Standards -

### Visual Arts

#### **Creating**

**Anchor Standard 1:** Generate and conceptualize artistic ideas and work.

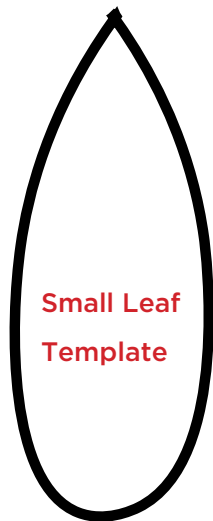
**Anchor Standard 2:** Organize and develop artistic ideas and work.

#### **Responding**

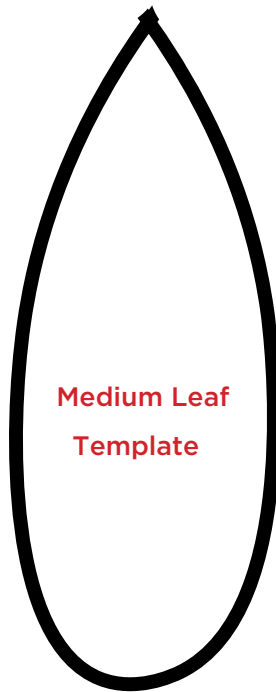
**Anchor Standard 8:** Perceive and analyze artistic work.

#### **Connecting**

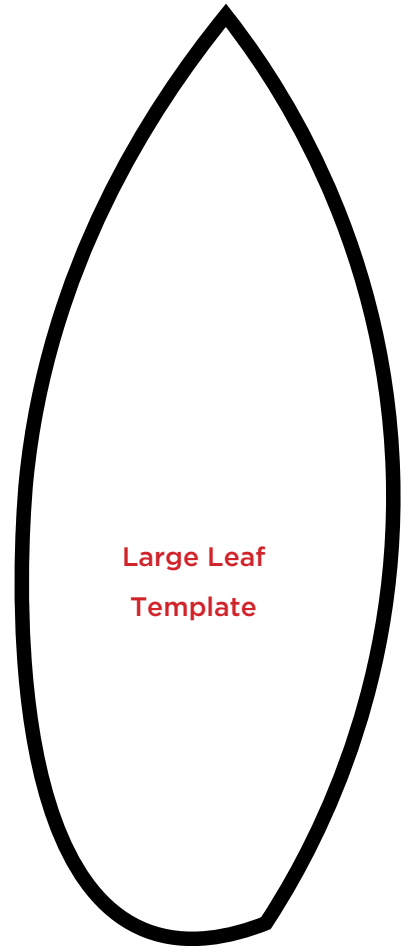
**Anchor Standard 10:** Synthesize and relate knowledge and personal experiences to make art.



Small Leaf  
Template



Medium Leaf  
Template



Large Leaf  
Template