

Wind Instrument Construction

Pinwheel Wind Collector

Materials:

- A straight pin
- A square piece of construction paper (about 8.5" x 8.5")
- · A sharpened pencil with an eraser
- Scissors

Procedure

Lay the square of paper flat on a table and draw a line diagonally from each corner to the opposite corner. Mark the center of the square where the two lines cross and punch a small hole through it with the pencil tip. Next, cut along each line, stopping about an inch from the hole in the center of the square. Take the straight pin and punch a hole in the top left corner of each of the four flaps. (No two holes should be next to each other.) Pick up a flap at a punched corner and carefully curve it over toward the center hole, securing it with the straight pin. Repeat this for the other flaps. When all four flaps are held by the straight pin, carefully lift the paper without letting the flaps unfurl. Lay the pencil flat on a table and carefully push the point of the straight pin into the side of the eraser.

Now your pinwheel is complete and ready to go. Pick up the pinwheel near the pencil point and let it catch the wind. Notice that the pinwheel only spins when the wind hits its center.

You now have a simple wind collector. The pinwheel is an example of a horizontal-axis active wind collector. It must be pointed into the wind in order to spin.