



# Magnetic Sun

## Magnetometer Directions

**DIRECTIONS** ► Make your own magnetometer, a tool to detect magnetic fields, using the steps below.

**Materials:**

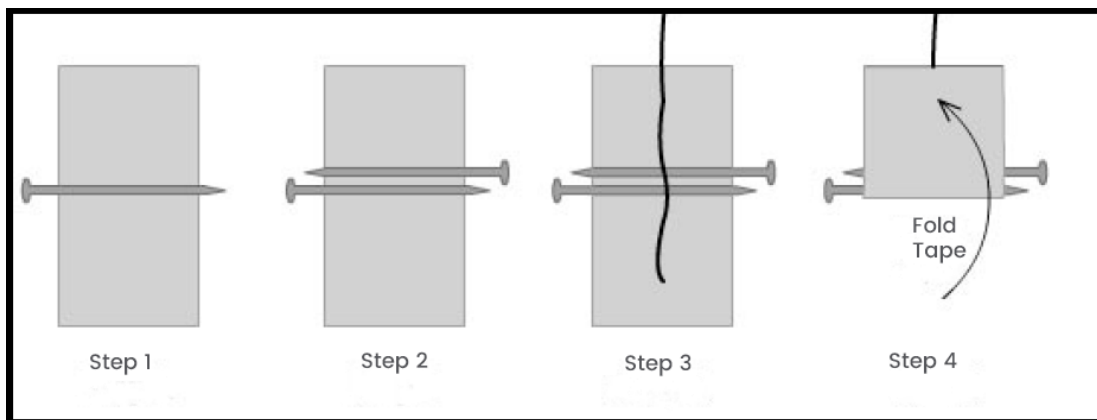
- A piece of drinking straw (about 4 inches long)
- 2 steel straight pins
- 2 pieces of masking tape (1 inch long)
- A piece of thread (about 7 inches long)
- A magnet

**Step 1:** Lay a pin across the sticky side of a piece of tape.

**Step 2:** Add a second pin facing the opposite direction. (If the heads of the pins stick out further than the points, the points won't poke you.)

**Step 3:** Lay one end of the thread across the pins and tape, oriented perpendicularly to the pins.

**Step 4:** Fold the tape over so that the pins are in the crease.



**Then...**

- Push the thread through the straw.
- Hold the straw vertically. Adjust the length of the thread so that the taped pins dangle just below the bottom of the straw. Make sure that they do not touch the straw.
- Fold the free end of the thread over onto the outside of the top of the straw and tape it into place.
- To magnetize the pins, stroke them along their length with one pole of the magnet.
- Then, check to see if the pins point toward the magnet!

