Straw Oboe

Snackbook pp.269-270

Construction:

- 1. Flatten one end of your soda straw.
- 2. Cut equal pieces from each side of the flattened end, so that the straw has two "lips" at the end. Looks like a duck's beak.

To do and notice:

Put the straw in your mouth and bite down on it gently with your front teeth, just beyond the lips of the straw. Then blow into the straw. You'll probably have to experiment with blowing harder and softer while biting down with different amounts of pressure until you make the straw sing.

What's going on?

The beveled "lips" you cut into the squashed end of the straw act as a reed for your instrument. When you blow into the reed and get it vibrating, you send pulses of compressed air down the straw, causing the air in the tube to start vibrating, too. Affected by the length of the tube, this vibrating air in turn affects the reed's vibrations. When the reed vibrates at just the right frequency, the air in the straw vibrates powerfully, and you hear a loud sound, sort of like an oboe.

SWIM: Materials: straw and scissors