

## Make your own Oboe – in less than 1 minute!

Quite a few people learn to play a musical instrument but very few learn to make one! We're about to make our very own straw oboes and it'll only take a minute.

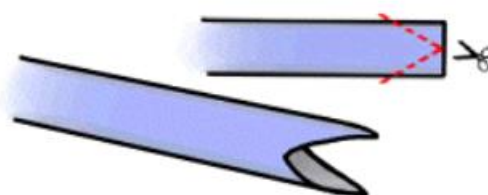
**WARNING:** This activity uses scissors, watch out your pointy straw will be sharp and is designed to make sound

### What do I need?

- A paper straw (variations or modifications can be done as follow-ups with different sized straws to change the sound produced) – BioPak are good as no colours or coatings.
- A pair of scissors.

### How do I do it?

1. Flatten the end of the straw (last 2 cm) down as much as possible with your fingers.
2. Cut the end of the straw into a point as shown to the right (top image to the right).
3. Make sure pointed end of the straw is open just a little bit (a bit more closed than the second image).
4. Blow gently through the pointed end of the straw.



This can take a few minutes to get the hang of as you find the right position in your mouth. Start with straw about half-way along your tongue (do not gag yourself) and as you blow out through the straw, slowly pull the straw out of your mouth to find the position that makes sound. When you get it right, what happens to your lips?

### What's going on?

Every single sound in the whole world works the exact same way. From children talking when they shouldn't! To the best musicians in the world! Whenever you hear a sound you know something must be vibrating (just another way of saying shaking). In this case it's the straw itself that's vibrating and making that beautiful noise.

For more details about the science involved go to:

<https://www.phys.unsw.edu.au/jw/woodwind.html>

More Fun Please! Experiment like a real scientist!

- First of all get the hang of playing your brand-new instrument!
- Next up, see what happens to the sound when you make the straw shorter (just cut it shorter!).
- What happens when you blow it harder?
- Keep your eye out for thicker and thinner straws (when you're out and about) and see if you can hear a difference between them?

*“The most exciting phrase to hear in science, the one that heralds the most discoveries, is not ‘Eureka!’ (I found it!) but ‘That’s funny...’” - Isaac Asimov*