

## WHISTLE WITH GRASS

Ages: Elementary and Up

Materials:

- Long thick blade of grass

Directions:

1. Pick a blade of grass that is as long as your thumb
2. Place 1 blade of grass between both thumbs
3. Make sure there is a gap between the grass and your thumbs
4. Place back of thumbs against your mouth and blow between your knuckles

What about...

1. How does cupping your hands change the sound?
2. How loud can you whistle?
3. How soft can you whistle?
4. Can you play a tune?
5. Why does this make a sound?
6. Can you think of any instruments that make a sound like this?
7. Pick a different piece of grass that is narrower or wider or fatter or skinnier. How is this sound different from the other?



### WHAT'S HAPPENING?

Sound is created when something vibrates.

Blowing on the thin edge of the blade of grass while it is held tight between your thumbs causes it to vibrate. When an object like a blade of grass vibrates it moves the air particles around it.

The air particles bump into other air particles making a sound wave. Vibrations enter our outer ears and cause our eardrums to vibrate so we hear sounds.

### DID YOU KNOW?

Crickets can hear using their legs. Sound waves vibrate a thin membrane on the cricket's front legs.

Dolphins and bats use echolocation. They make sounds and listen to the echo to detect movement and locate object with sound

