## **Straw Pan Flutes**

## **Materials for Homemade Straw Pan Flutes**

- Cardstock
- Scissors
- Double-sided tape
- Plastic Straws
- Black Sharpie
- Ruler
- Optional: Markers, crayons, or stickers for decorating
- Optional: Free Printable Music Recording Sheet (in color or black and white) and a pencil

## **Directions for Making Straw Pan Flutes**

Take five wide straws and cut them into varying lengths:
6 inches, 5.5 inches, 5 inches, 4 inches, and 3.5 inches.
Encourage children to measure and cut their own straws.

2. Cut two strips of cardstock to 7 inches x 1.5 inches. *Optional: Decorate your cardstock with markers, crayons, or stickers.* 

3. Place a 7-inch strip of double-sided tape onto the inside of one piece of cardstock strips.

4. Place the longest straw on the tape first, near the left edge. You'll want one end of the straw hanging about 3/4 inch over the side. Place the shortest straw on the right-hand side of the tape, with the same amount (about 3/4 inch) hanging over the edge. Next place the middle length straw right in the center. Place the remaining two straws onto the tape. All the ends of the straws should line up about 3/4 inch over one edge of the cardstock.

5. Place the double-sided tape onto the other black strip of cardstock and place it on top of your straws, lining it up with the first piece of cardstock. Press down firmly.

6. Number each straw 1-5 with a black Sharpie.

7. Practice making sounds with your flute by resting the tops of the straws on your lower lip and blowing across them. (You can also make noise blowing right into the straw. That's fine too and much easier for younger children.)

8. Did you create some tunes or songs you like and want to play again? Write the numbers of each note onto the printable recording sheet. You can even give your song a name.

## What's the STEM or STEAM behind this activity?

**Science:** What's the physics behind making sound from a straw in the pan flute? As you blow across the straw, the air in the straw vibrates. So, what you are actually hearing is the air inside of the straw, not the flute itself. You can change the pitch by changing the length of the straw. A long straw produces a low note. A short straw produces a high note.

**Engineering:** Kids have the opportunity to build and design their own instrument. They can see how the placement of the various lengths of the straws affects the ability to use the flute.

**Art:** The pan flutes can be decorated to express your child's creativity! They also have the opportunity to write and record their own music.

Math: Kids will need to measure and compare lengths in order to create their straw pan flute.







