# Let's make a Zoetropel

Have you ever wondered how to make your own animation? It's actually pretty simple! All you need are a bunch of pictures that you show one after the other. If each picture is just a little different from the one before, your brain will put them together and make it look like the pictures are moving.

One classic animation invention from way back in 1834 looks like a big round can with thin slits cut into the top. It's called a **zoetrope**! Building a zoetrope is a fun engineering challenge, and when you're done, you can make endless animations for it!

Visit **www.snacknotes.com/zoetrope** for detailed instructions, videos, animation templates, coloring sheets, and more!

### Step 1: Cutting the parts

Cut along the solid lines and fold along the dotted lines. You will have 4 parts:

- An octagon base with a connected side panel
- · One single side panel
- · Two three-side panels

Make sure the thin openings in each panel are removed before assembling! It's a lot easier to cut when the parts are flat:)

### Step 3: Make it Spin!

Carefully poke a hole in the bottom of your zoetrope. Use a pencil to widen the hole until the pencil can easily spin in the hole. Then cut strips from the wide piece of double-sided tape and attach around the plastic spinner attachmen. Attach spinner to the bottom of your zoetrope. Place pencil into center hole of the spinner. If your pencil is too

## Step 2: Assemble your Zoetrope

Use the <u>thin strips</u> of double-sided tape to attach the panels to the base.

- Attach the single-sided panel to the base, connecting the C-tab to side C of the base
- Fold each of the B-tabs of the three-sided panels with a 90-degree angle. Attach them to the base at sides B1, B2, and B3.
- Connect the A-tabs and the D-tabs to form the walls of your zoetrope.

#### Step 4: Get animating!

You're ready to make animations! Place an animation strip around the inside of the zoetrope and give it a spin!

This zoetrope is designed for an 8-frame animation with each frame being a 2x2 square.

Warning: Choking Hazard. Not for children under 3 years. The activity involves cutting and other potentially hazardous tasks, which should be done with the help and supervision of an adult.