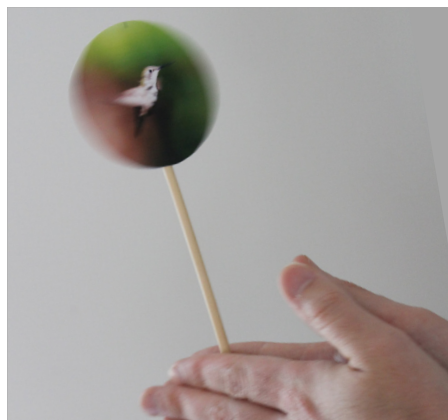


Are you looking for something to do to keep your brain active and engaged? We're here to help with Science at Home! You can conduct these fun science experiments using commonly found items. You can also visit us at the Museum's [Science at Home](#) page for additional resources.

Make a Thaumatrope

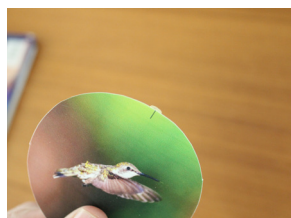
Make this simple optical illusion toy and simulate the rapid flight of a hummingbird.



Materials:

Scissors
Glue or tape
Chopstick, skewer, or thin dowel
Thaumatrope template (*provided with these instructions*)

Instructions:



Step 1: Cut out both thaumatrope templates. Align the tip of the stick with the marker on the top of one of the templates.



Step 2: Secure the stick to the back of the template with several pieces of tape. Apply glue to the back of the attached template.



Step 3: Line up the second template to the first using the markers as a guide, and glue it in place. Allow the thaumatrope to dry completely before trying it out. Once the glue has dried, rub the stick between your palms to create the animated image — *Can you see the hummingbird flapping its wings?*

Natural Connections

Before animated GIFs, television and movies, people made moving pictures using a thaumatrope. A thaumatrope is a 19th century toy that has two images on either side of a spinning disc. When looking at the disc in motion, the two images appear as one. This illusion is created by the slight delay between the time it takes for our brain to process an image that we are seeing. If spinning fast enough, the result is a whirling, singular picture!



Fast Fliers

Hummingbirds get their name from the humming sound that their wings produce in flight. Ruby-throated hummingbirds can flap their wings more than 50 times per second, and can fly forward, backward, up and down! Keep your eyes (*and ears*) open for these avian acrobats as they zip through your neighborhood.

Having Fun?

We want to see! Tag us [@NCMNSWhiteville](#) and [@naturalsciences](#) on social media, so we can see you and your loved ones enjoying our Science at Home experiments.

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