

# CRAFTY TUESDAYS



## ZOETROPE ('wheel of life')

This fun craft produces the illusion of action from a rapid succession of static images that you draw! Just spin and watch your own animation movie. Here's a list of girls' programming that girls can complete by making a zoetrope:

- *Sparks*: Exploring and Experimenting
- *Brownies*: Key to STEM
- *Guides*: Discover Your Creativity
- *Pathfinders*: Movie Mania  
OR Everything comes from STEM
- *Rangers*: Explore your Creativity

## MATERIALS:

- 1 round flat circular box (i.e. Laughing Cow cheese box)
- Scissors
- Glue
- Pencil and markers
- Tape
- Ruler
- Marble or round bead
- Exacto knife
- 1 White piece of paper
- 1 Black piece of paper



## INSTRUCTIONS:

### Part I: Drawing Your Animated Strip

1. Measure the width of the lid onto the length of the white piece of paper. Cut out the paper strip that is as wide as the box lid and as long as the circumference of the box. (This paper will sit along the inside of the box when the zoetrope is complete.)
2. Measure double the width of the lid onto the length of the black piece of paper. Cut slits on one side of the black strip of paper, approximately 1.5 cm apart. Remove 0.5 cm from each slit so that the black paper resembles a hair comb with some missing teeth.
3. Place the black strip on top of the white strip and trace the slits with a pencil. These lines indicate where your images will be drawn on the white paper.
4. Draw a series of related images lengthwise on your white paper. Try images that loop, such as an image of a person doing a jumping jack, or a bee flying in a loop. Set aside.

## *Zoetrope Instructions continued:*

### *Part II. Creating the Zoetrope box*

- 5.** Place the marble in the centre of your box and trace it.
- 6.** Cut out the circle carefully. The circle should be slightly larger than the marble.
- 7.** Tape over the hole from the outside. Turn the box back over and place a dot on the tape in the centre of the marble hole on the inside. Cut the tape radially, starting from your dot, in the direction of the radius to create a starburst cut into the tape. Pull back the sunrays so that they extend to the bottom and outside of the box.
- 8.** Glue the marble to the inside circle, ensuring that it extends slightly beyond the bottom rim so there is surface contact when the Zoetrope is spun.
- 9.** Carefully remove the tape just from the marble on the bottom side of the box so that the marble is secure by the glue and held in place by the tape on its sides (not its bottom). This will ensure smooth surface contact with the table when the zoetrope is spun.
- 10.** Glue the black paper strip around the outside edge of the box.
- 11.** Set the white strip of paper inside the black paper so that the image faces inwards, and the paper runs along the bottom edge of the box circumference.

That's it! Place your zoetrope on a table and spin away!  
Watch how your image appears as if it is actually moving!