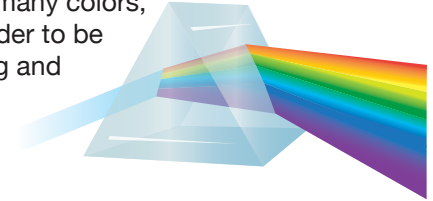# Newton's Color Wheel

In the 1660s, English scientist Isaac Newton proved that white light is a mixture of different-colored wavelengths of light when he observed the light passing through a prism. From a blur of many colors, he noted seven distinct tones. Those seven colors are still what many consider to be "the colors of the rainbow." Follow the steps to make a color wheel whirlygig and make the colors blend into a rainbow.
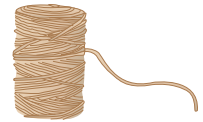
MATERIALS

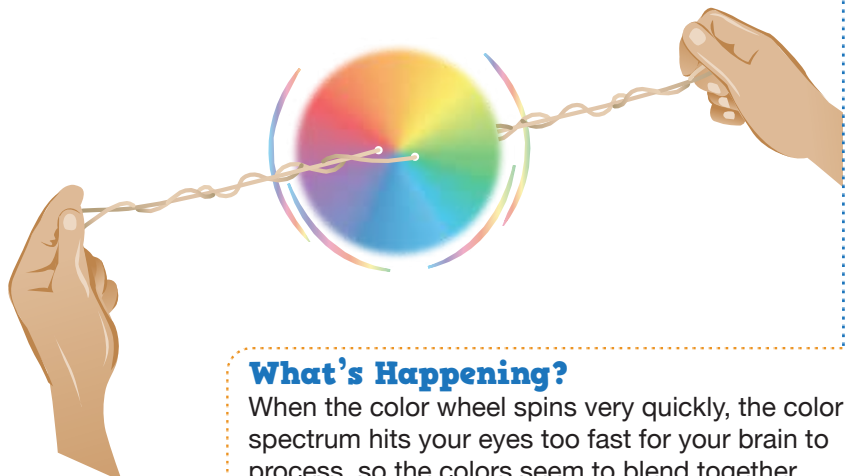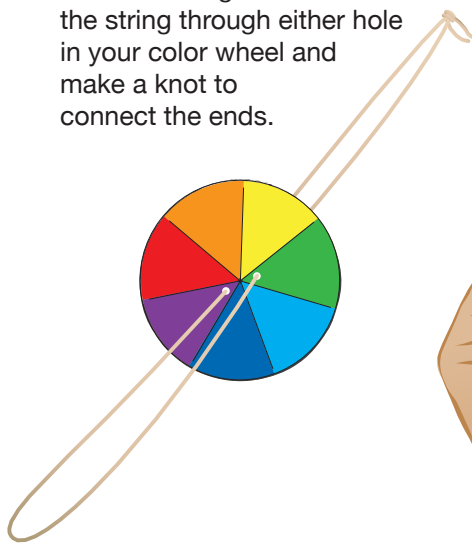crayons or markers | scissors | sharp pencil | cardboard | glue | string

INSTRUCTIONS

1 On the next page, color each slice to match the labels.

2 Use scissors to cut out each wheel.

3 Use your pencil to trace around one of the cut-out color wheels onto a piece of cardboard.

4 Use scissors to cut the cardboard along the line you drew.

5 Glue your paper onto both sides of the cardboard circle. Allow the glue to dry.

6 Use the point of a pencil to poke a small hole through the cardboard at each of the X marks.

7 Cut a piece of string to measure 30 inches long. Guide each end of the string through either hole in your color wheel and make a knot to connect the ends.

8 Hold the string in each hand so it's almost taut and quickly loop your hands in a circluar motion so the string gets twisted. Pull on the string to make the wheel spin.

What's Happening?
When the color wheel spins very quickly, the color spectrum hits your eyes too fast for your brain to process, so the colors seem to blend together.

Newton's Color Wheel

England

Red Orange Yellow Green Blue Indigo Violet

Red Orange Yellow Green Blue Indigo Violet