

CREATE A Rainbow

TWO WAYS!

Science tip:
Wavelength is
the distance between
two points of a wave.

Violet has the
shortest wavelength,
making it bend more
and putting it at
the bottom
of a
rainbow.

Red has the
longest wavelength
among colors, so
the light bends
less. This puts it
on top of a rainbow.

RAINBOW WALKING WATER

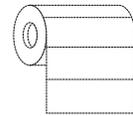
You'll need:



7 small clear
plastic
cups or glasses



Food
coloring



Paper
towels



Water

WHAT TO DO

- Fill out predictions on included recording sheet.
- Place 7 cups in a row and pour water in the 1st, 3rd, 5th, and 7th cup. Fill a little more than 3/4 full.
- Add 5 drops of red food coloring to the 1st and 7th cup.
- Add 5 drops of yellow food coloring to the 3rd cup.
- Add 5 drops of blue food coloring to the 5th cup.
- Take a half sheet of paper towel and fold it in half lengthwise once, then again.
- Trim off some length so that there won't be too much sticking up in the air between each cup.
- Place one half of a folded paper towel in the first cup and the other half in the cup next to it.
- Place another rolled paper towel in the second cup and into the third. Continue through the sixth to the seventh cup.
- Watch the cups and see what happens! Record observations.
- Flip this sheet over for another rainbow experiment!

 Watch an ORLA staff member perform this experiment here:
<https://youtu.be/tryO4UwDI4Q>

Share a picture of your experiment with us (with a grown-up's permission)!



@orlalibraries

OIL REGION
Library
ASSOCIATION

CREATE A Rainbow

TWO WAYS!

In nature, a rainbow is formed when sunlight is reflected from droplets of water in the air.

Note: Never look directly at the sun or at the reflection of the sun in a mirror.

MAKE A RAINBOW ON YOUR WALL

You'll need:



A clear glass of water



Sunlight



A small mirror

WHAT TO DO

- Put your mirror inside your glass of water at an angle.
- Position the glass so the sun shines directly at the mirror. You may have to shift the mirror to find the right angle.
- Look for a reflection on the wall. It may be easier to see if the room is dark.
- Adjust the angle of the mirror until you see a rainbow on the wall!
- Flip this sheet over for another rainbow experiment!

For other rainbow experiments with light, visit:

<https://www.rookieparenting.com/make-your-own-rainbow-science-experiment/>

Share a picture of your experiment with us (with a grown-up's permission)!



@orllibraries

