

WHITE LIGHT, RAINBOWS AND BUBBLES

MATERIALS NEEDED:

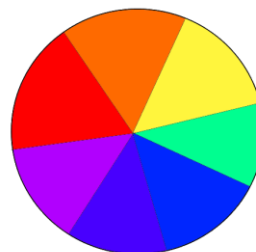
Paper Plate Pencil Flashlight Water Dish soap Straw
Small cup or glass Crayons or markers: red, orange, yellow, green, blue, purples

Directions:

1. Watch this video or read about rainbows. <https://www.youtube.com/watch?v=nCPPLhPTAlk>

Activity 1:

- A. Take a paper plate and split it into seven sections. Color the sections in the colors of the rainbow: red, orange, yellow, green, blue, indigo (mix red and blue together, but use more blue), and violet.



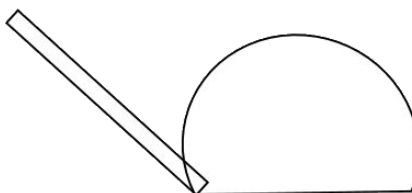
- B. Push a pencil through the middle of the plate and then spin it like a top. What do you notice?

Activity 2:

- A. Mix water with dish soap to make a bubble mixture.
- B. Fill the small cup or glass with bubble mixture.
- C. Place straw in the bubble mixture and blow a bunch of bubbles.
- D. Turn off the lights.
- E. Turn on the flashlight and shine it on the bunch of bubbles. Do you see any rainbows?

Activity 3:

- A. Put a little amount of bubble mixture in the bottom of the straw.
- B. Place the straw (bubble end down) on the table and slowly blow to make a large bubble appear on the table.
- C. Turn off lights.



- D. Turn on the flashlight and shine it on the bubble. How many rainbows appear?
- E. Experiment with the size of a bubble. Do more rainbows appear the bigger the bubble?