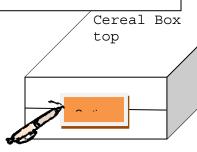
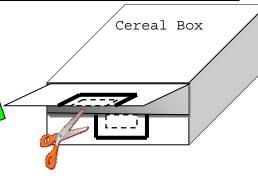
Making your

CEREALBOX SPECTROSCOPE

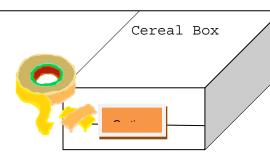
1. Select one end of the cereal box, and close the flaps. Place a diffraction grating on this end and outline it with the sharpie. This will be referred to as the front of your "Spectroscope".



2. Open the flaps and cut a hole smaller than the size of your outline in the cereal box.



4. Tape the cereal box flaps closed. Arrange your diffraction grating right side up (so you can read the label), then tape it over the hole you just cut. Make sure you can look through the grating and see inside the box.

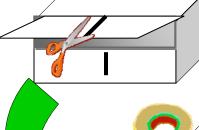


5. Rotate the box around so you are now looking at the opposite end. (This will be the back of your "Spectroscope"). Close the two flaps and draw a line down the center (top to bottom, not side to side). The line should be directly opposite the diffraction grating, and centered.

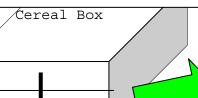


Cereal Box

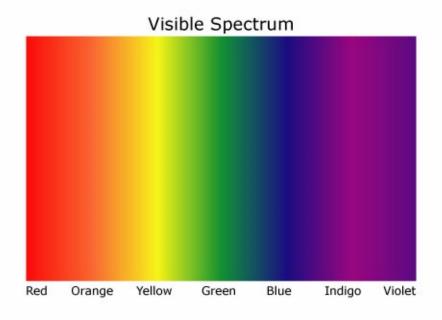
6. Cut along the mark you just made, making a very, very narrow slit in the box.

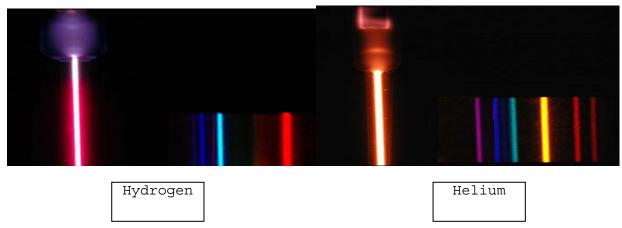


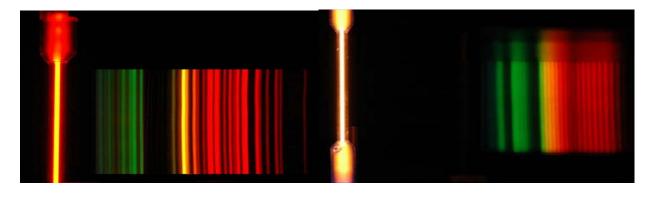
7. Close and tape the flaps on the back of your box.



You're done!! Look through the grating in your spectroscope to see the light spectrum! (Note: Diffraction gratings can be obtained from various educational science resource stores)







Neon

Nitrogen