

Magic School Bus: Rainbows

1. Why do the colors of a rainbow always come out in a certain order? (Red on the outside, violet on the inside)

2. The light in the pinball machine is _____ off the mirrors inside.

3. What is another name for everyday light?

4. If you see an object that is green, what color of light is entering your eye?

5. What can you use to separate white light?

6. What is white light really made up of?

7. How does a prism work?

**** Highlight the words you think are important...**

LIGHT AND COLOR

- Light Travels as a TRANSVERSE wave

- **Visible light** waves are the only electromagnetic waves we can see.

- Each color has a different wavelength.

- Red has the longest wavelength and violet has the shortest wavelength.

ROY G. BIV

• Visible color spectrum: Red, Orange, Yellow, Green, Blue, Indigo, and Violet

• A rainbow spans a continuous spectrum of colors; the distinct bands are artificially determined by humans.

• In **Roy G. Biv**, the colors are arranged in the order of *decreasing wavelengths* with red being 650 nm and violet being about 400 nm.