Blender Activity1

1. Light interacts differently with different objects depending on the wavelength of the light and the texture of the object's surface. There can be a reflection, absorption, and transmission when light falls on an object.
   Examples:
   - We see objects in the real world because of the light falling on them reflects our eyes.
   - When light falls on a surface, lights of certain wavelengths will be absorbed by the object.
   - Transmission of light happens when light passes through glass.

2. Objects appear to have different colors to our eyes, because they absorb certain wavelengths of light, reflect some, and transmit.

3. YUV color space is more efficient in coding.

4. Colors are added differently for lights compared to paint because light has all wavelengths combined and cannot show different individual colors. In each case, different values of R+G+B will result in different colors.

5. Green screens are greens because the color of the objects in front of the green screen is not screen. In order for the effect to work, the background must use a color that isn't used elsewhere.

6. The goal of Tone Mapping is to reproduce the appearance of images having a higher dynamic range than the reproducing media such as prints or standard monitors.

7. Each color has a different wavelength. Red has the longest wavelength, and violet has the shortest wavelength. When all the waves are seen together, they make white light.