1. How does light interact differently with different objects in real life?

Light is kind of wave, it reflected depending on the situation of the object.

Examples:

Lightwave got observed by water and water got heated.

When light interacts with any mirror it got reflected.

When light interacts with any liquid it gets converted into gas.

2. Why do objects appear to have different colors to our eyes?

   Light is a mixture of different colors. in our eyes, there is a tissue called the retina. Special cells called rods and cones and basically, their job is to spotlight and let the brain know about it.

3. What's the advantage of using YUV color space?

   In YUV color space new color is not needed for every pixel and therefore only half of the memory space is required. Only a gray image is needed.

4. How are colors added differently for lights compared to paint? What does R+G+B equal to in each case?

   Colors are added differently for lights compared to paint because when we are adding a mix of colors in the light it appears paler and brighter but in paint, it appears to sully and darker.

   R+G+B: R stands for Red G stands for Green and B stands for Blue.

5. Why are green screens green?

   Green screens are used for video shooting because the color green is different from our body color. It helps video editing.

6. Why is tone mapping needed for HDR images?

   Tone mapping is needed for HDR images because it helps to look image more realistic on most modern displays.

7. What’s the relationship between the wavelength of the light and the color of the light?

   The relationship between the wavelength of the light and the color of the light is:

   here light of different wavelengths produces different perceptions of color. Purple-Indigo-Blue-Green-Yellow-Orange-Red are a part of a spectrum of white light and its wavelength is increasing from purple to Red.