

Name: _____ Date: _____ **Bill**

Nye the Science Guy Light & Color

1. _____ light is a mixture of all the colours of the rainbow.
2. When white light passes through a prism it breaks up into all the _____, called the _____ of colours.
3. The orange fruit looks orange because it _____ the colour orange and _____ all the other colours.
4. When light is absorbed, it is changed to _____.
5. Mixing all colours of light makes _____ light; mixing all colours of paint results in a _____ color.
6. Neon lights are filled with neon gas, which is then excited by high voltage _____ and becomes colourful.
7. Red absorbs all colours of light, except _____.
8. The colour _____ absorbs most of the heat from the sun and reflects very little; wearing _____ allows you to stay cool because the clothes will reflect most of the light.
9. Red light is made of _____ and _____ waves; blue light is _____ and _____ waves.

10. Why is the sky blue?

11. Why does water look blue on a sunny day?

Bill Nye: Light and Color Video Quiz

Circle the correct word or phrase to make the sentence correct.

1. The colour of an object is the colour it ABSORBS / REFLECTS.
2. The colours of the rainbow CAN / CAN'T be broken down or separated further.
3. The PHOTONS / CHEMICALS in the skin of fruits and vegetables absorb and reflect light to make them look like different colours.
4. Black light is seen when light is almost completely ABSORBED / REFLECTED. The energy is then changed from HEAT / COLOUR to HEAT / COLOUR.
5. A LASER / SPECTRUM is a very intense beam of light.
6. The colour RED / BLUE has a long wavelength, while the colour RED / BLUE has a short wavelength.
7. Our sky appears blue because the atmosphere ABSORBS / SCATTERS more blue light than any other colour.