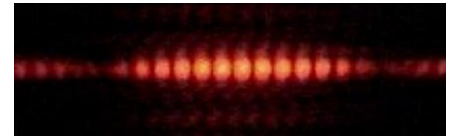


Objective: Decide which model of light is primary for various effects of EM radiation.

Decide whether the effects given in the following situations are best explained by the particle model or wave model of light.

Explain your answers.

1. Young's double-slit interference pattern



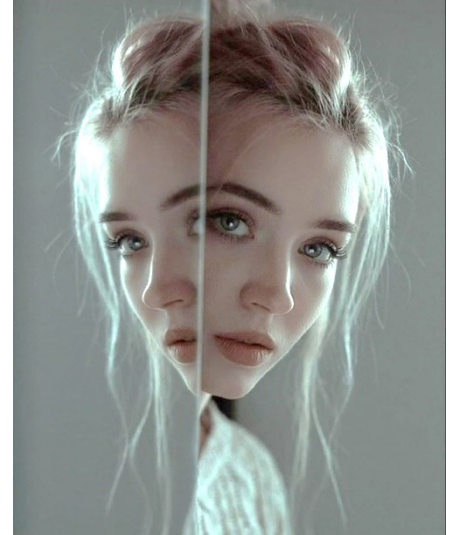
2. Photoelectric effect

3. Reflection off a mirror

4. Refraction as light passes into a prism

5. Multiple-slit diffraction as light passes through a diffraction grating

6. Solar sail on a space craft moving away from the sun



7. A radio picking up the radio signal

8. A microwave cooking food

9. X-rays causing a chemical reaction on the film

10. Gamma rays breaking DNA molecules in a cell



11. UV light fading colors of paint

12. Gamma rays passing through gold foil