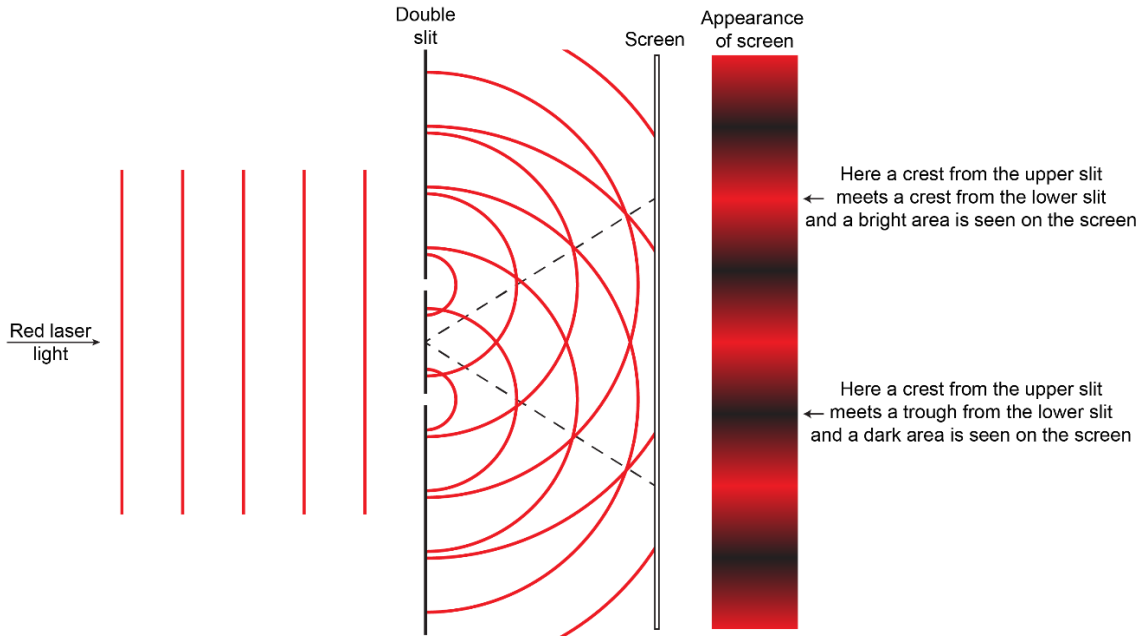
Result

Blue light differs from red light because the wavelength is smaller and the frequency is larger. When waves with shorter wavelength pass through two slits, the crests and troughs are closer together. Thus, the places on the screen where two crests overlap are closer to the center of the screen and the places where a crest and trough overlap are also closer. For blue light the interference pattern has dots of light that are closer together. Compare the first and second figures below.



The next figure shows a case where the wavelength of light is shorter than the wavelength in the first figure. Notice how the shorter wavelength results in narrower spacing of the interference pattern.