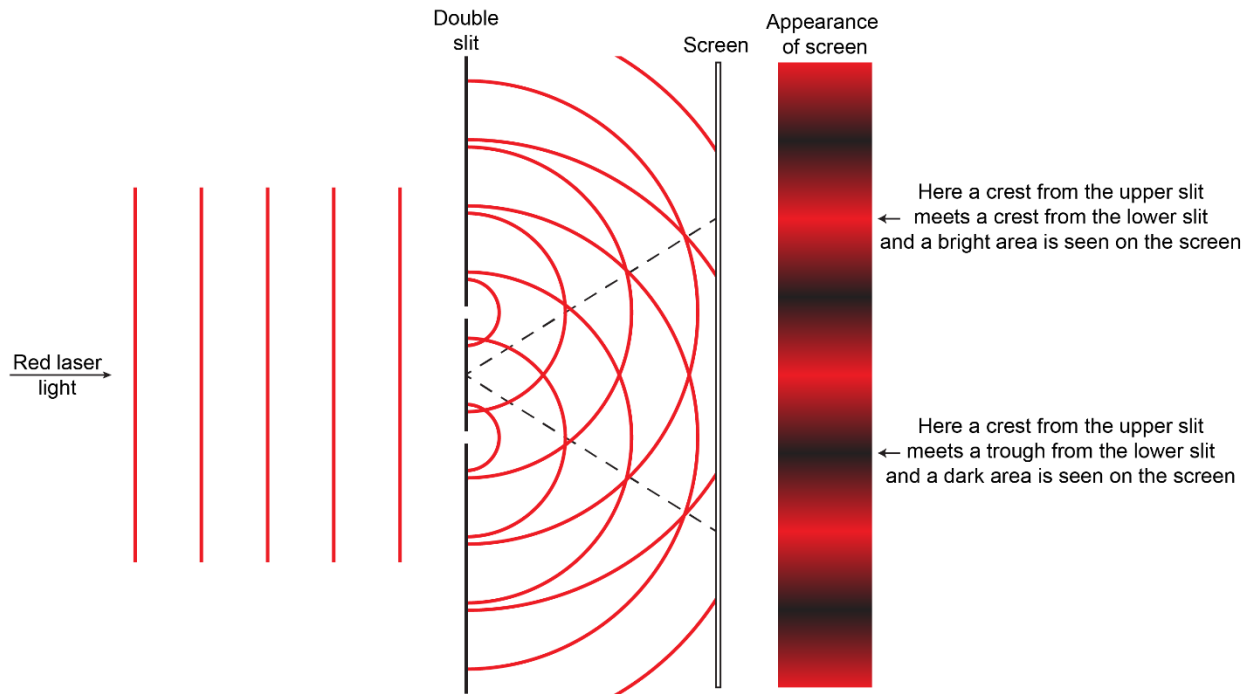


## Result

*This explanation may be longer than what you wrote; if so, make certain that you have included all the ideas expressed here.*

As the waves pass through each opening they fan out. There are regions where the crest of a wave from the upper slit coincides with the crest of a wave from the lower slit; there is constructive interference and if the region is at the surface of the screen a bright area is seen. There are other regions where the crest of one wave coincides with the trough of another wave; this gives destructive interference and a dark area on the screen.



To see an animation of waves passing through two slits, view this video:

<http://openstaxcollege.org/l/16duality>.