Diffraction

1. Diffraction is the bending of light in general, as opposed to refraction, which is the bending of light while traveling from one medium to another
2. This also happens to sound waves.
3. If λ is about equal to the diameter of a hole, then lots of bending occurs.
4. If the door is wide compared to the λ, then wave only bends a little and doesn't reach back to the sides of the door.
5. Visible light does not bend much on a macro level because of its relative short λ
6. To get light to bend, you would need a tiny door, like a light grating.
7. Waves will interfere with each other cause interference.
8. Constructive interference happens because waves add together where they meet.
9. Destructive interferences happens because waves cancel each other out where they meet.
10. When λ was shorter, more interference happens.
11. Locations of interference depend upon the λ
12. As λ decreases, interference points get closer
13. Diffraction determines resolution