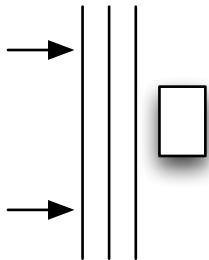
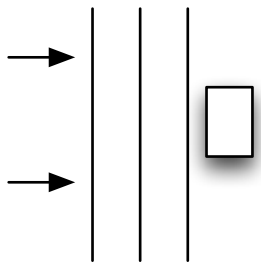


Open Diffraction video at mrmont.com

1. Watch the first part of the video where waves are sent at a small obstacle. Sketch what happens when the HIGH frequency (waves CLOSE together) waves go past the obstacle. Label the shadow.



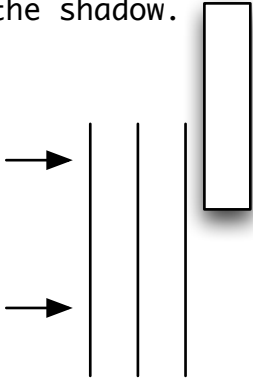
2. Sketch what happens when the LOW frequency (waves FAR apart) waves go past the obstacle. Is there a shadow?



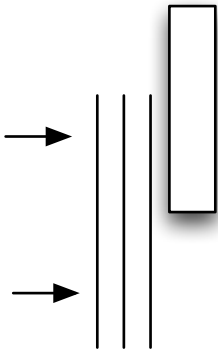
3. Which ones bend (diffract) best around an object - high frequency or low frequency?

4. Sound bends around most objects while light tends to not bend around objects and leaves a shadow. What would you say about the frequency of sound compared to light?

5. Watch the next part of the video where waves are sent through a gap. Sketch what happens when the LOW frequency (waves FAR apart) waves go through. Label the shadow.



6. Sketch what happens when the HIGH frequency (waves CLOSE together) waves go past the obstacle. Label the shadow.



7. Which ones bend (diffract) best around corners - high frequency or low frequency?

8. If you stand outside a classroom door and around the corner, sometimes you can hear the teacher talking. Do you think you would be more likely to hear a female teacher or a male teacher if they speak just as loud as each other? (Males tend to speak at lower frequencies, while females tend to speak at higher frequencies.)