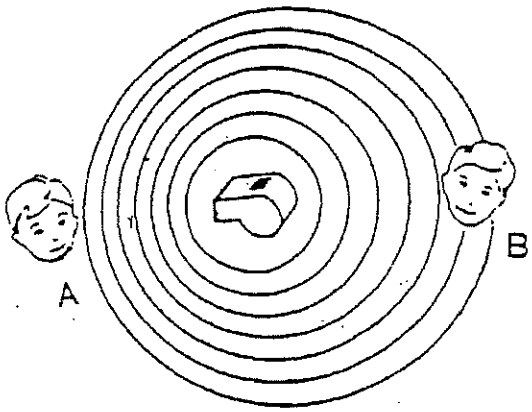
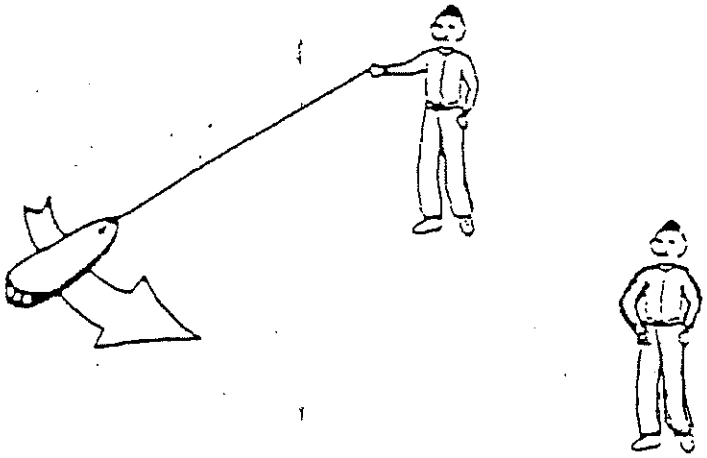
4. Now let's suppose the whistle is moving. The diagram shows waves crowding together in front of the moving whistle and spreading out behind the whistle.




5. In which direction is the whistle moving? Place an arrow on the diagram to show direction.

6. Which observer will hear the higher pitch? Circle that person on the diagram.

7. Draw sound vibrations around the moving buzzer that is moving in the direction of the arrow. Write "HIGH" on the side of the whistle where an observer would hear a high-pitched sound and "LOW" on the side where an observer would hear a low-pitched sound.



8. Doppler Effect: When a sound is moving with respect to the observer, the sound's pitch appears to change. Because of the motion of the source, illustrated here as a racing car, the sound waves appear to be bunched up in front and spread out in back. This results in shorter wavelengths, or an increased frequency, in the front of the source and longer wavelengths, or a lower frequency, behind the source.