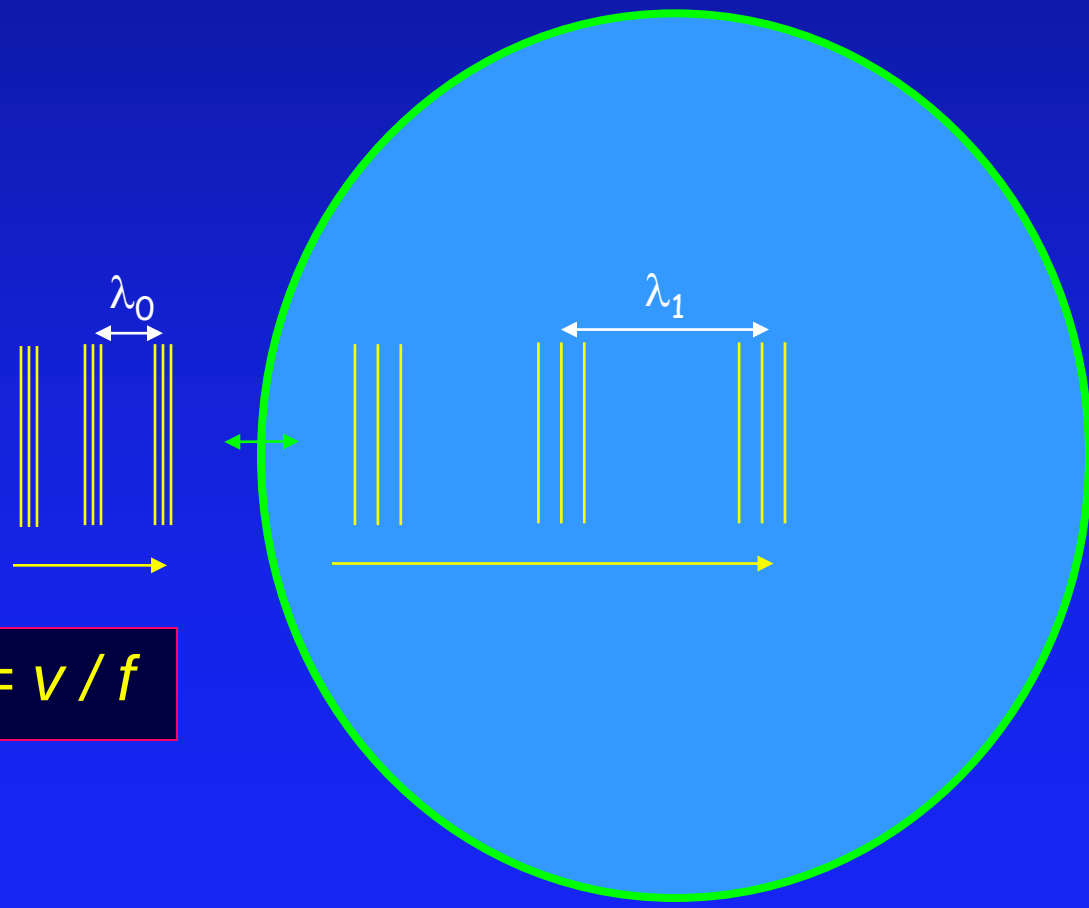
Wavelength ACT

A sound wave having frequency f_0, speed v_0 and wavelength λ_0, is traveling through air when in encounters a large helium-filled balloon. Inside the balloon the frequency of the wave is f_1, its speed is v_1, and its wavelength is λ_1 Compare the wavelength of the sound wave inside and outside the balloon

1. $\lambda_1 < \lambda_0$
2. $\lambda_1 = \lambda_0$
3. $\lambda_1 > \lambda_0$ ⟵ correct



$\lambda = v / f$