website: link fra kapitel 1

## Bølgeudbredelse i stof

Her kan du finde en animation, som simulerer bølgeudbredelsen gennem luftens molekyler: https://www.teachmeaudio.com/recording/sound-reproduction/sound-waves/

## Sound Waves

A sound wave is a **longitudinal** pressure vibration set in motion by any event that generates energy, such as a vibrating object.

Uddannelse

If a sound wave is moving from left to right through air, then the particles of air will be displaced both rightward and leftward as the energy of the sound wave passes through it. Vibrating air molecules cause the human eardrum to vibrate, which the brain interprets as sound.

It's important to remember that air molecules do not actually travel from the noise source to the ear. Each individual molecule only moves a small distance as it vibrates, which causes the adjacent molecules to vibrate in a rippling effect all the way to the ear.



## Fig 1 - Longitudinal sound wave

Remember that longitudinal waves, for example, sound waves, are not **transverse** waves. Most waves are actually transverse, including light and the ripples we see on water.

Her kan du finde en animation, som simulerer bølgeudbredelsen gennem vandets molekyler: <u>https://dosits.org/decision-makers/tutorials/science/what-is-sound/</u>

Begge sider indeholder en rigdom af yderligere materialer om lyd