# **Comparing Energy**

# Mediums Light can Travel through

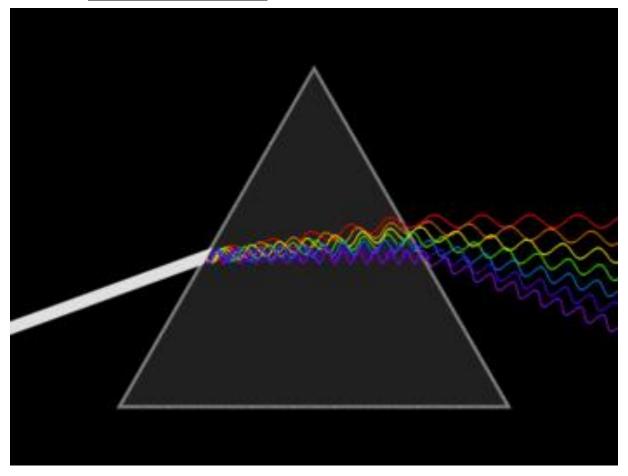
Light can travel through <u>Space</u>, <u>gas</u>, <u>liquid</u> and

solid.



## Type of **Light** Wave

Light is a <u>transverse</u> wave.



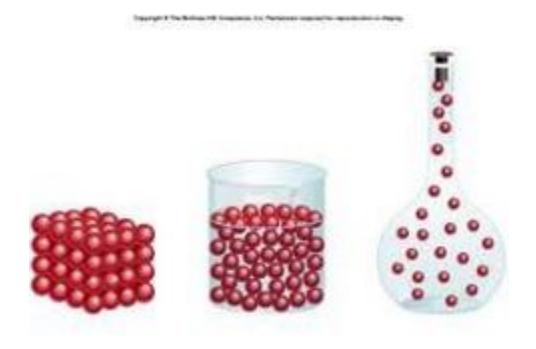
### Speed of **Light** Wave

• Light is the <u>FASTEST</u> energy in the universe... nothing can travel as fast as light.



### Mediums Sound Can Travel Through

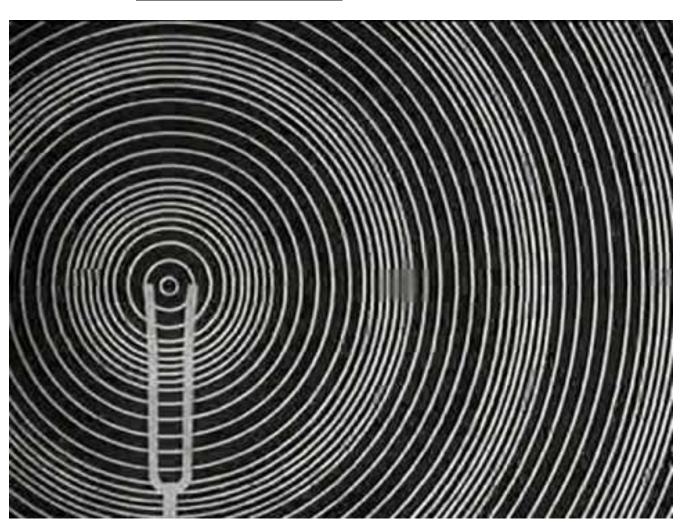
- Sound can travel through <u>Solid</u>, <u>Liquid</u> and <u>Gas</u>
- Sound can <u>not</u> travel through <u>Space</u>





## Type of **Sound** Wave

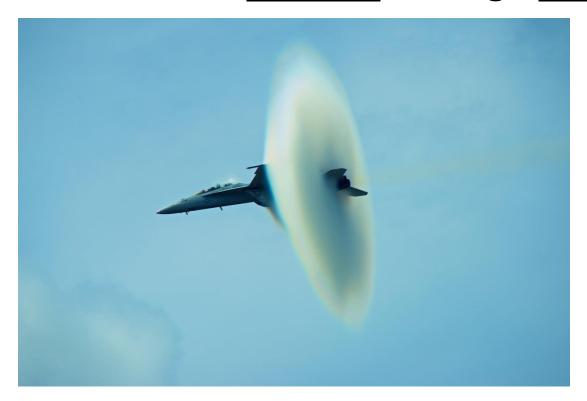
• Sound is a <u>longitudinal</u> wave.





### Speed of **Sound** Waves

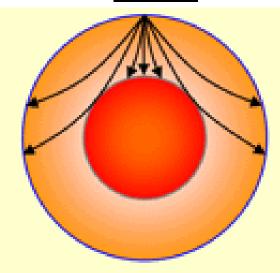
- Sound waves travel <u>Fastest</u> through <u>solid</u>.
- 2<sup>nd</sup> fastest sound wave are in <u>liquids</u>.
- Sound waves travel <u>Slowest</u> through gas.





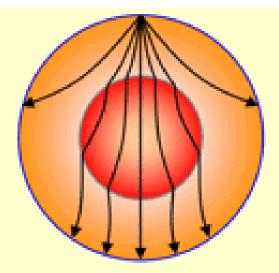
### Mediums Earthquake Waves Travel Through

- P- Waves- Solid, Liquid
- <u>S-</u> Waves- <u>Solid</u>... NOT Liquid



#### S waves

- transverse
- slow moving
- travel through solids only



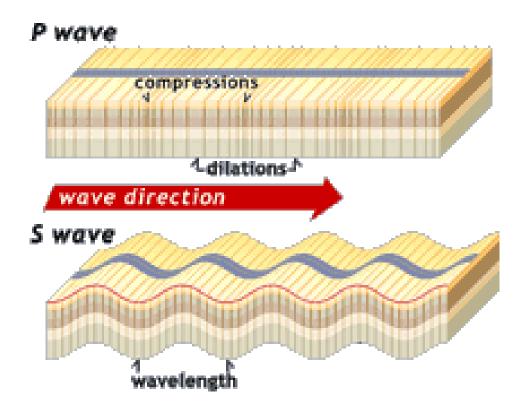
#### P waves

- longitudinal
- fast moving
- travel through liquids and solids

### Type of **Earthquake** Waves

P-Waves: Longitudinal

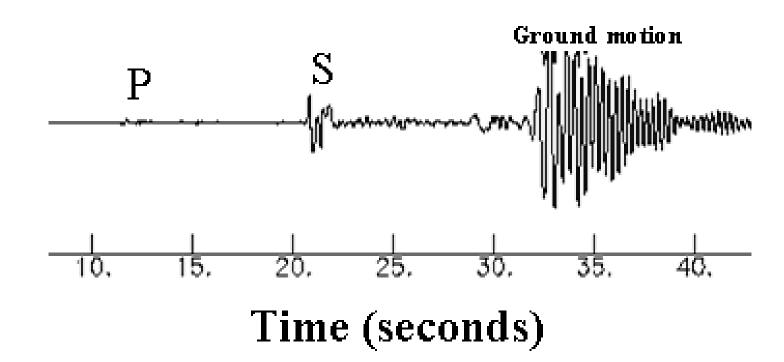
S-Waves: Transverse



### Speed of Earthquake Waves

P-Waves: Fastest

S-Waves: Slower



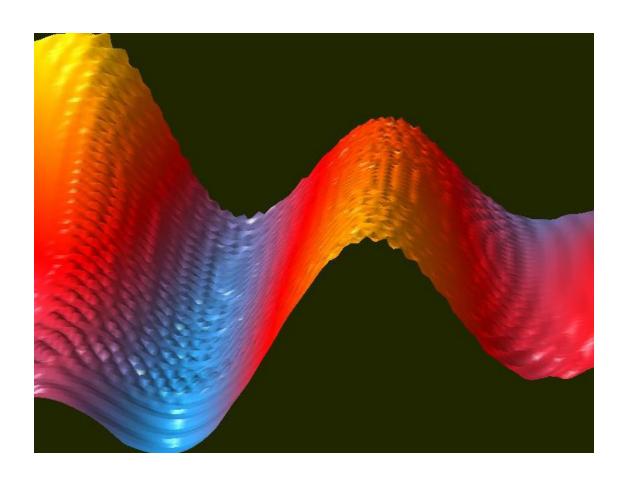
### Mediums Heat Waves Travel Through

 Heat waves travel through <u>Solid</u>, <u>Liquid</u>, & <u>Gas</u> and <u>space</u>



# Type of **Heat** Wave

Heat waves are <u>transverse</u>



## Speed of **Heat** Waves

- Varies
- (we will learn more about heat waves next week.)

