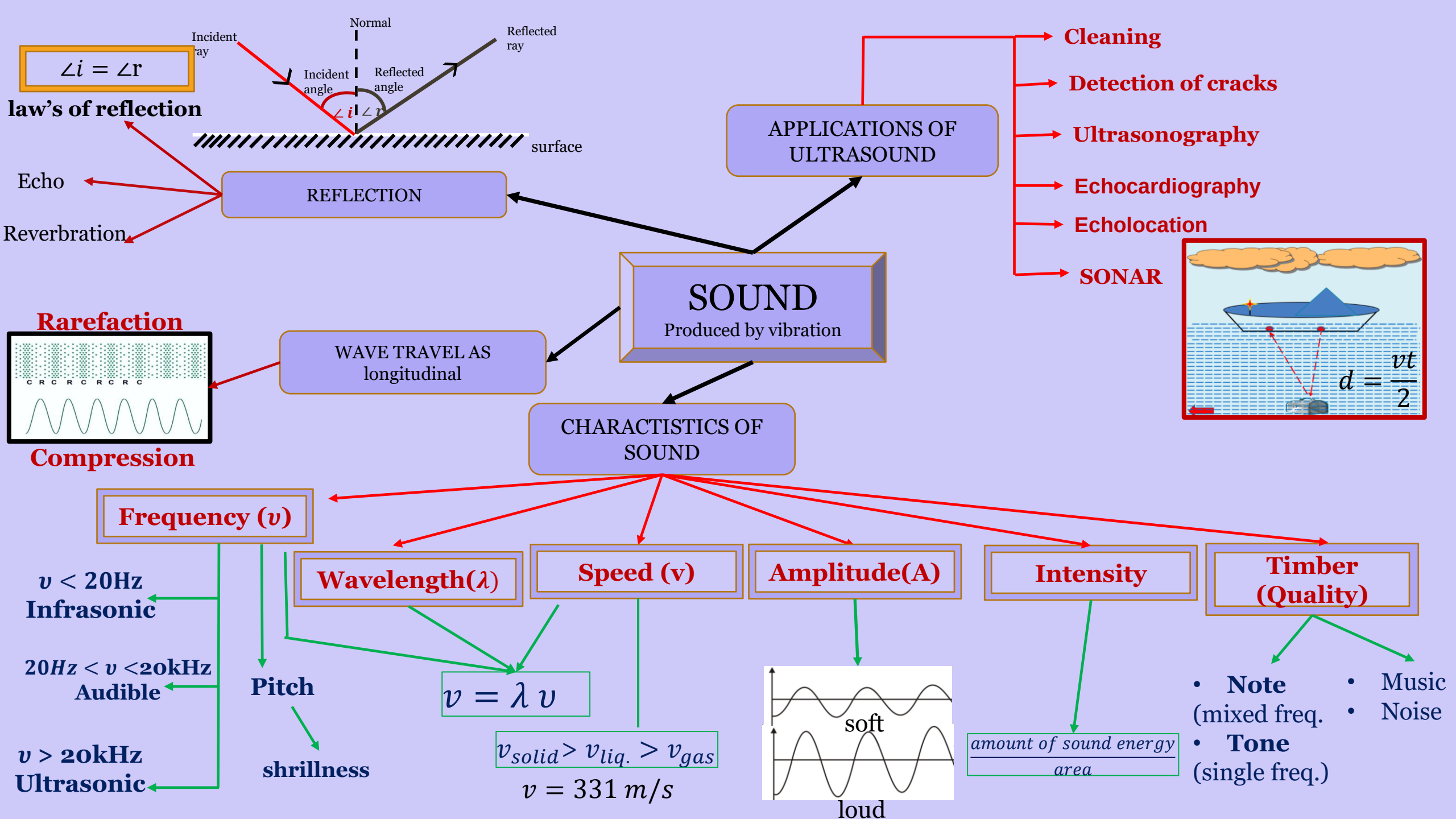




TARSIA

Activity

The diagram is a large equilateral triangle divided into 16 smaller triangles, each containing a physics concept related to sound. The triangle is oriented with a vertex at the top. The concepts are distributed as follows:

- Top vertex: Mechanical wave
- Second row from top: Need medium (left), Reciprocal of frequency (right)
- Third row: Caused due to multiple reflection (left), Used to detect crack in metals (right)
- Fourth row: Reverberation (left), ultrasound (right)
- Fifth row: Law of reflection (left), Can travel in vacuum (right)
- Sixth row: Sound with mixed frequency (left), Electromagnetic wave (right)
- Seventh row: NOTE (left), Range of Ultrasound (right)
- Eighth row: Convert sound vibration into electric signal (left), Unpleasant sound (right)
- Ninth row: Cochlea (left), Noise (right)
- Tenth row: Amount of sound energy per unit area (left), Speed of sound is maximum in (right)
- Eleventh row: Intensity of sound (left), Loudness depends on (right)
- Twelfth row: Shrillness of sound (left), Amplitude (right)
- Thirteenth row: Pitch (left)
- Fourteenth row: Method to find depth of sea (left)
- Fifteenth row: SONAR (left)
- Sixteenth row: Solid (left)

Need medium

	Reciprocal of frequency	Time Period
Used to describe		

Used to detect crack in metals

ultrasound

Wave equation
 $v = v\lambda$

ultra

Can travel in vacuum

Electromagnetic wave

Range of Ultrasound
 $>20\text{ kHz}$

Sound produced by Whale

Infrasonic

Noise

Cochlea

NOTE

Amount of sound energy
per unit area
density of s

Intensity of sound

Shrillness of sound
Pitch

Method to find depth of sea
SONAR

SONAR

Speed of sound is maximum in
Solid

Solid

loudness depends on
Amplitude