

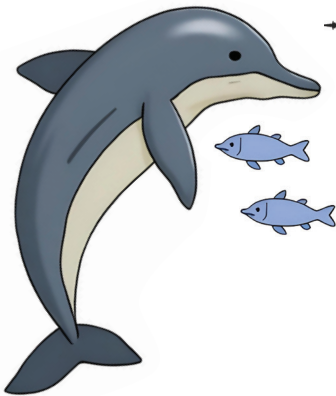
# ULTRASOUND

## UNCOVERED

### THE HIDDEN POWER OF SOUND WAVES

kHz stands for kilohertz, and it's a way of measuring how many times something happens every second – usually sound waves or signals.

Ultrasound refers to sound waves with frequencies higher than the human ear can detect. (above 20 000 kHz)



### ULTRASOUND & ANIMALS

Many animals use ultrasound for navigation, hunting, and communication. It's a biological phenomenon known as ECHOLOCAION.

Bats use echolocation when they emit high-frequency sound waves that bounce off objects in their environment. This allows them to detect the location, size, and movement of prey, even in complete darkness.

Dolphins and certain species of whales also use clicks and listen for echoes to navigate through murky waters, locate schools of fish, and even communicate with each other.

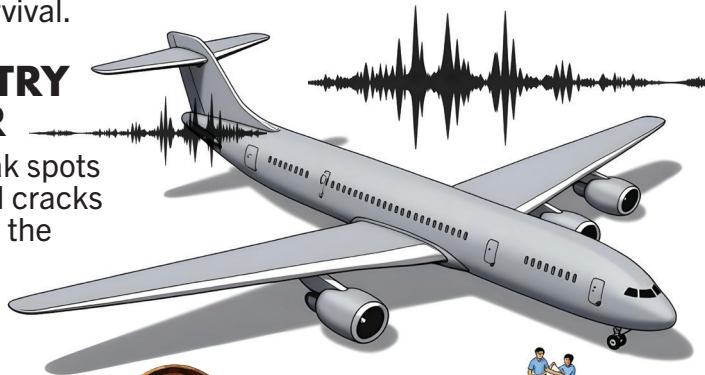
This natural use of ultrasound demonstrates its effectiveness as a tool for survival.

### ULTRASOUND IN INDUSTRY & THE AIRPLANE SECTOR

In industry, ultrasound can detect weak spots in metal objects. In aviation, it can find cracks in aeroplane wings that are invisible to the naked eye.

High-frequency sound waves are sent into the material, and any disruptions in the wave patterns indicate the presence of imperfections.

Delicate mechanisms like antique clocks are also cleaned and maintained by using ultrasounds.



STOP,  
SCAN & STUDY!



Scan the  
QR code & get  
subject study  
assistance!

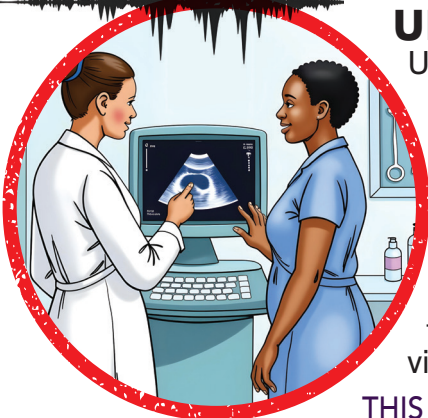


### ULTRASOUND IN MEDICINE

Ultrasound has become an invaluable tool in modern medicine due to its safety, non-invasiveness, and ability to provide real-time imaging.

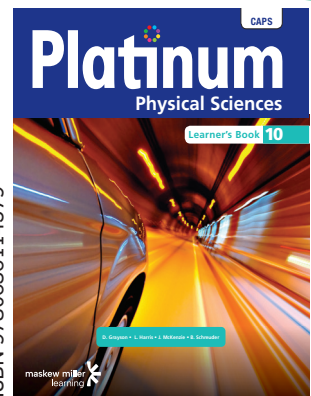
It is widely used for diagnostic purposes, particularly in obstetrics, where it allows doctors and expectant parents to monitor the development of a foetus.

Ultrasounds can also detect abnormalities like tumours, cysts, and blockages in arteries and other vital organs.



THIS WORKSHEET IS PUBLISHED BY **maskew miller learning**

ISBN 9780636114579



© Copyright 2025 Maskew Miller Learning. All Rights Reserved.