

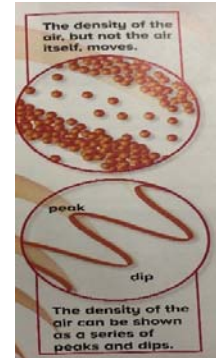
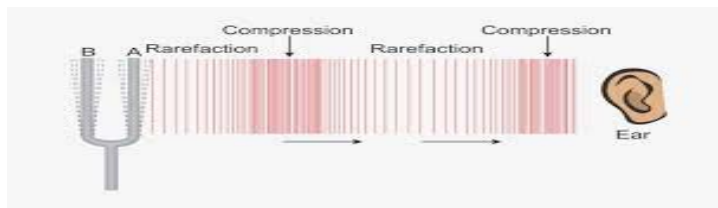
كل ما يحتاجه الطالب في جميع الصفوف من أوراق عمل واختبارات ومذكرات، يجده هنا في الروابط التالية لأفضل مواقع تعليمي إماراتي 100 %

<u>تطبيق المناهج الإماراتية</u>	<u>الاجتماعيات</u>	<u>الرياضيات</u>
<u>الصفحة الرسمية على التلغرام</u>	<u>الاسلامية</u>	<u>العلوم</u>
<u>الصفحة الرسمية على الفيسبوك</u>	<u>الانجليزية</u>	
<u>التربية الاخلاقية لجميع الصفوف</u>	<u>اللغة العربية</u>	
<u>التربية الرياضية</u>		
<b>مجموعات التلغرام.</b>	<b>مجموعات الفيسبوك</b>	<b>قنوات تلغرام</b>
<u>الصف الأول</u>	<u>الصف الأول</u>	<u>الصف الأول</u>
<u>الصف الثاني</u>	<u>الصف الثاني</u>	<u>الصف الثاني</u>
<u>الصف الثالث</u>	<u>الصف الثالث</u>	<u>الصف الثالث</u>
<u>الصف الرابع</u>	<u>الصف الرابع</u>	<u>الصف الرابع</u>
<u>الصف الخامس</u>	<u>الصف الخامس</u>	<u>الصف الخامس</u>
<u>الصف السادس</u>	<u>الصف السادس</u>	<u>الصف السادس</u>
<u>الصف السابع</u>	<u>الصف السابع</u>	<u>الصف السابع</u>
<u>الصف الثامن</u>	<u>الصف الثامن</u>	<u>الصف الثامن</u>
<u>الصف التاسع عام</u>	<u>الصف التاسع عام</u>	<u>الصف التاسع عام</u>
<u>الصف التاسع متقدم</u>	<u>الصف التاسع متقدم</u>	<u>الصف التاسع متقدم</u>
<u>الصف العاشر عام</u>	<u>الصف العاشر عام</u>	<u>الصف العاشر عام</u>
<u>الصف العاشر متقدم</u>	<u>الصف العاشر متقدم</u>	<u>الصف العاشر متقدم</u>
<u>الحادي عشر عام</u>	<u>الحادي عشر عام</u>	<u>الحادي عشر عام</u>
<u>الحادي عشر متقدم</u>	<u>الحادي عشر متقدم</u>	<u>الحادي عشر متقدم</u>
<u>ثاني عشر عام</u>	<u>الثاني عشر عام</u>	<u>الثاني عشر عام</u>
<u>ثاني عشر متقدم</u>	<u>ثاني عشر متقدم</u>	<u>ثاني عشر متقدم</u>

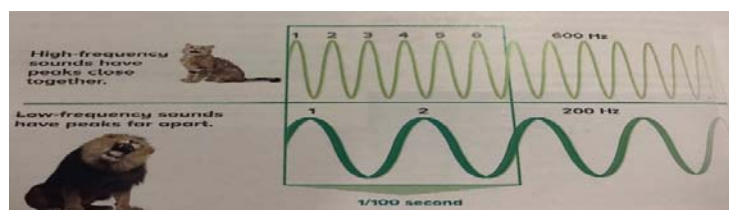
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## Science Grade 5 Chapter 8: using energy Lesson 1: Sound

- **Compressions:** regions of air that have many particles. (Peaks)
- **Rarefactions:** regions of air that have few particles. (Dips)
- Sound waves vibrate in the **same direction** that they travel
- **Sound wave:** a series of rarefactions and compressions travelling through a substance



- **Medium for wave:** the substance through which the wave travels
- **Vacuum:** a region that contains few or no particles like outer space.
- **Sound** can travel through **solids, liquids and gases**
- **Sound travel** with the **greatest speeds in solids** and the **lowest speeds in gases**
- **The temperature of the medium** affects the **speed of sound**
  - In warmer air, particles move faster. As a result they collide more often and transmit sound faster
  - Water is a good medium for sounds like dolphin songs.
- **Echoes:** are sound waves that have reflected back to the speaker (Source)
- **Reflection:** is the bouncing of a wave off a surface
- **Frequency:** is the number of times an object vibrates per second
  - (the number of peaks of a wave per second)
- **Frequency unit:** cycle per second (1/s) or Hertz (Hz)
- **Pitch:** is the perceptual quality which permits the distinction between a low frequency sound and a high frequency sound
- **Doppler effect:** a change in frequency due to moving toward or away from a wave
  - You can increase the frequency of a sound wave by moving toward it.
- **Volume:** refer to the strength or weakness of sound
- **Amplitude:** is the maximum displacement moved by particles of the medium away from their equilibrium position.
- **Decibels (dB):** is used to measure the volume of sounds
  - Ex: sounds above 85 decibels damage your hearing
- **Echolocation:** is finding food or other objects
  - Example: bat, whales and dolphins used echolocation to orient themselves and to find food
- **Sonar:** is a system used under water to find objects



إضغط هنا  
قناة ملفات علوم  
خامس 5

**Science Grade 5**  
**Chapter 8: using energy**  
**Lesson 1: Sound**

**Please answer the following the following questions**

- **Regions of air that have many particles are called :**
  - Rarefactions
  - Vibrations
  - Compressions
  - Energy
  
- **Boats used -----to find objects under water**
  - Decibels
  - Doppler effect
  - Sonar
  - Compressions
  
- **At what volume do sounds start damaging hearing?**
  - 10 decibels
  - 65 decibels
  - 85 decibels
  - 150 decibels
  
- **Bat, whales and dolphins used -----to orient themselves and to find food**
  - Doppler effect
  - Amplitude
  - Echolocation
  - Decibels
  
- **An echo is an example of a sound wave being -----**
  - Transmitted
  - Absorbed
  - Reflected
  - Surfed
  
- **The original sound is louder than its echo because some of the energy from the original sound wave is -----**
  - Reflected
  - Compressed
  - Amplified
  - Absorbed

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**Science Grade 5**  
**Chapter 8: using energy**  
**Lesson 1: Sound**

- **Which unit is used to measure the volume of sound?**
  - hertz (Hz)
  - ohm  $\Omega$
  - decibels (dB)
  - ampere (A)
  
- ----- **refer to the strength or weakness of sound**
  - Doppler effect
  - Volume
  - Pitch
  - Sonar
  
- **A series of rarefactions and compressions travelling through a substance-----**
  - Sound wave
  - Vacuum
  - Echoes
  - Sonar
  
- **Regions of air that have many particles-----**
  - Compressions
  - Rarefactions
  - Vacuum
  - Pitch
  
- **Regions of air that have few particles-----**
  - Compressions
  - Rarefactions
  - Vacuum
  - Pitch
  
- **A region that contains few or no particles like outer space.**
  - Pitch
  - Vacuum
  - Sonar
  - Doppler effect
  
- **Sound can travel through-----**
  - Solids, liquids and gases
  - Solid and liquid
  - Liquid and gas
  - Only solids

**Science Grade 5**  
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- **Sound travel faster in-----**
  - Freeze water
  - cold water
  - warm water
  - ice
  
- **Sound waves that have reflected back to the speaker( source) -----**
  - Sound wave
  - Vacuum
  - Echoes
  - Sonar
  
- **The number of peaks of a wave per second.**
  - Frequency
  - Pitch
  - Sonar
  - Echoes
  
- **The perceptual quality which permits the distinction between a low frequency sound and a high frequency sound -----**
  - Compressions
  - Rarefactions
  - Vacuum
  - Pitch
  -
  
- **A change in frequency due to moving toward or away from a wave-----**
  - Vacuum
  - Doppler effect
  - Echoes
  - Sonar
  
- **The maximum displacement moved by particles of the medium away from their equilibrium position.**
  - Doppler effect
  - Amplitude
  - Echolocation
  - Decibels
  
- **Finding food or other objects-----**
  - Doppler effect
  - Decibels
  - Amplitude
  - Echolocation

**Science Grade 5**  
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• **Fill the blanks.**

<b>Decibels</b>	<b>Volume</b>	<b>Doppler effect</b>	<b>vacuum</b>	<b>Echolocation</b>	<b>Frequency</b>
<b>Amplitude</b>	<b>Pitch</b>	<b>Reflection</b>	<b>Sonar</b>	<b>Echoes</b>	

- A region that contains few or no particles like outer space-----
- Bat, whales and dolphins used----- to orient themselves and to find food
- A system used under water to find objects -----
- ----- are sound waves that have reflected back to the speaker (Source)
- The bouncing of a wave off a surface -----
- The number of times an object vibrates per second-----
- The perceptual quality which permits the distinction between a low frequency sound and a high frequency sound -----
- A change in frequency due to moving toward or away from a wave-----
- -----is the strength or weakness of sound
- ----- is the maximum displacement moved by particles of the medium away from their equilibrium position.
- ----- is used to measure the volume of sounds

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