تم تحميل هذا الملف من موقع المناهج الإماراتية

almanahj.com/ae

موقع المناهج الإماراتية

الملف أوراق عمل درس Sound الصوت
موقع المناهج ⇦ المناهج الإماراتية ⇦ الصف السابع ⇦ علوم ⇦ الفصل الثاني

روابط مواقع التواصل الاجتماعي بحسب الصف السابع			
			
روابط مواد الصف السابع على تلغرام			
التربية الاسلامية	اللغة العربية	اللغة الانجليزية	الرياضيات

المزيد من الملفات بحسب الصف السابع والمادة علوم في الفصل الثاني	
1	كل مايخص الاختبار التكويني لمادة العلوم للصف السابع يوم الثلاثاء 11/2/2020
2	مراجعة درس الموجات. منهج انجليزي
3	ورقة عمل الصوت والضوء
4	أوراق عمل الوحدة الثامنة الدرس الأول 2017
5	مراجعة للوحدة 11

Sound

Name _____ Class _____ Date _____

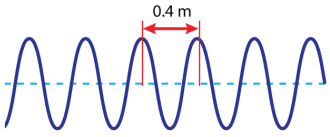
1 A boat is anchored at sea. What does the **up and down** motion of the boat show?

A The molecules of water only move up and down while the energy moves forward.
B The ocean is standing still.
C The boat's motor is on.
D The molecules of water move side to side while the energy moves forward.

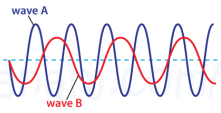
2 What is the **frequency** of a wave with a **speed of 20 m/s** and a **wavelength of 0.4 m**?

wave speed = wavelength x frequency

A 8 Hz
B 0.2 Hz
C 50 Hz
D 20.4 Hz



3 Which statement about **wave A** and **wave B** is **correct**?



A Wave A has a greater amplitude and a greater wavelength.
B Wave B has a greater amplitude and a greater wavelength.
C Wave A has a greater amplitude and a shorter wavelength.
D Wave B has a greater amplitude and a shorter wavelength.

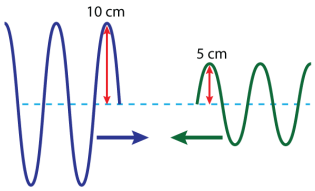
4 Speed of sound changes due to the medium in which sound waves travel. Based on this chart, what is the **overall trend** from the **slowest to the fastest** medium?

A solids, liquids, gases
B gases, liquids, solids
C liquids, solids, gases
D all the same speed

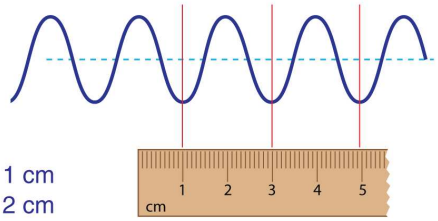
Speed of Sound		
medium		speed
gases	air (0° C)	331
	air (20° C)	343
liquids (30° C)	fresh water	1,509
	salt water	1,546
solids (25° C)	lead	1,210
	iron	4,480
	aluminum	5,000
	glass	5,170

5 Two waves are moving in **opposite directions** through a medium. The waves will **interfere constructively**. What is the **amplitude** of the wave produced when wave A and B meet?

A 0
B 15
C 5
D 20



6 What is the **wavelength** of the wave?

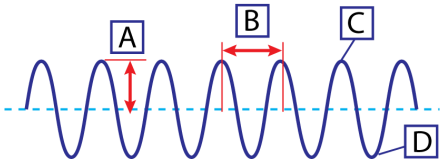


A 1 cm
B 2 cm
C 3 cm
D 4 cm

7 When you sit in a certain seat in an auditorium you notice the sound is actually **softer** than it is a few seats forward. Which **wave interaction** explains this problem?

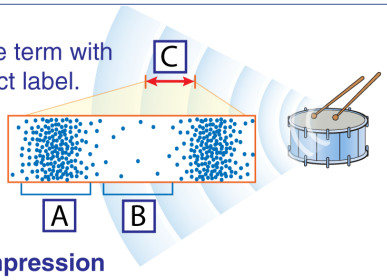
A reflection
B interference
C diffraction
D refraction

8 Match the term with the correct label.



☐ **trough** ☐ **amplitude**
☐ **wavelength** ☐ **crest**

9 Match the term with the correct label.



☐ **compression**
☐ **rarefaction** ☐ **wavelength**

10 Match the term with the correct definition.

☐ **music**
☐ **overtones**
☐ **resonance**
☐ **quality of sound**

A. sound that produces pleasing patterns
B. distinct sound of an instrument
C. natural vibrational frequency

Sound

ANSWER KEY

A boat is anchored at sea. What does the **up and down** motion of the boat show?

A The molecules of water only move up and down while the energy moves forward.
B The ocean is standing still.
C The boat's motor is on.
D The molecules of water move side to side while the energy moves forward.

a

ANSWER

C

50 Hz

speed = wavelength x frequency
20 m/s = 0.4 m x frequency

Which statement about **wave A** and **wave B** is **correct**?

A Wave A has a greater amplitude and a greater wavelength.
B Wave B has a greater amplitude and a greater wavelength.
C Wave A has a greater amplitude and a shorter wavelength.
D Wave B has a greater amplitude and a shorter wavelength.

c

Speed of sound changes due to the medium in which sound waves travel. Based on this chart, what is the **overall trend** from the **slowest to the fastest** medium?

A solids, liquids, gases
B gases, liquids, solids
C liquids, solids, gases
D all the same speed

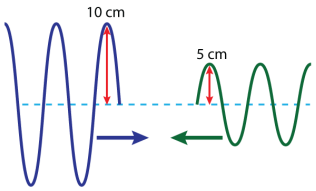
Speed of Sound

medium		speed
gases	air (0° C)	331
	air (20° C)	343
liquids (30° C)	fresh water	1,509
	salt water	1,546
solids (25° C)	lead	1,210
	iron	4,480
	aluminum	5,000
	glass	5,170

b

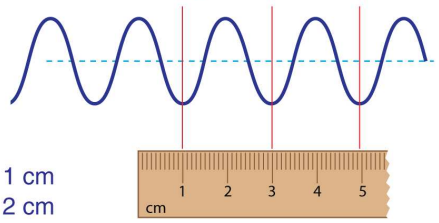
Two waves are moving in **opposite directions** through a medium. The waves will **interfere constructively**. What is the **amplitude** of the wave produced when wave A and B meet?

A 0
B 15
C 5
D 20



b

What is the **wavelength** of the wave?



A 1 cm
B 2 cm
C 3 cm
D 4 cm

b

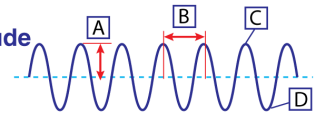
When you sit in a certain seat in an auditorium you notice the sound is actually **softer** than it is a few seats forward. Which **wave interaction** explains this problem?

A reflection
B interference
C diffraction
D refraction

b

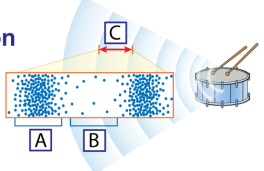
ANSWER

D trough
B wavelength
A amplitude
C crest



ANSWER

A compression
B rarefaction
C wavelength



ANSWER

A **music:** sound that produces pleasing patterns
C **resonance:** natural vibrational frequency
B **quality of sound:** distinct sound of an instrument