

Q1: Put correct number of meaning near each type of energy:

1- Substance where sound can travels.

A-(**2**.....) Sound wave موجة صوت

2- Wave that transfers energy through a material and spreads outward in all directions from a vibration.

B-(**3**.....) Vibration اهتزازات

3- Back and forth motion.

C-(**1**.....) Medium الوسط

4- Devices used light from Sun to produce electricity.

D-(**5**.....) Longitudinal wave موجات طولية

5- Wave vibrating in the same direction that the energy moves.

E-(**4**.....) Solar cell خلية شمسية**Q2: Choose correct answer for each one:**

1-Astronauts in space cannot talk to each other unless they use a radio to speak. Why is this?

a-The force of gravity is too strong to allow sound waves to travel.

b- There is no air in space, so there is no medium to carry sound waves.

c-It is very loud in space, so they can only hear each other through a radio.

2-To stop a drum from producing sound, you would:

a-Hit it harder

b- Hit it softer

c- Stop it from vibrating

3-Sound travel through outer space.

A Does not

b-Does

4-How does sound energy travel?

a-in strings

b in waves

c-in pulses

5- A pom-pom launcher صوت دوي القاذفة

a-Transfers kinetic energy to thermal energy.

b-Transforms kinetic energy to sound energy.

c Transforms stored energy to energy of motion.

6- Why are sounds not heard in space? لماذا لا يُسمع الصوت في الفضاء؟

a-Space is too cold for sound to travel.

b- Energy cannot travel in space.

c Space is a vacuum with few particles to travel through.

7-Light travels as tiny of energy

a- Particles

b-Pulses نبضات

8- Human can only see the on the electromagnetic spectrum.

☒ a-Visible light

☐ b-Ultraviolet

☐ c-Microwaves

9- Solar cells are also called

☐ a- Gamma ray

☒ b- photovoltaic cell

10 -Different forms of radiation all together are known as the

☐ a-Visible Light

☒ b- Electromagnetic spectrum

☐ c-Infrared

11 -A fire truck's siren and flashing lights are examples of ___ and ___ energy.

☐ a-Heat and Nuclear

☒ b-Light and sound

☐ c-Chemical and Thermal

12- Form of energy that allows you to see objects is

☐ a-Heat

☒ b- Light

☐ c- Sound

Q3: Arrange these items according to the speed of sound:



Juice

(.....**2**.....)

Liquid



Steel Pan

(.....**1**.....)

Solid



Wind

(.....**3**.....)

Gas

Q4: Compare between Sound & Light : قارن بين الصوت والضوء

Choose correct answer for each: اختر الإجابة الصحيحة لكل نقطة

اختر الإجابة الصحيحة لكل نقطة	Sound	Light
Moving	a- Beams <input checked="" type="radio"/> b- Wave	c- Conduction
Wave Type	<input checked="" type="radio"/> a-Mechanical, Longitudinal waves. <input type="radio"/> b-Electromagnetic, Transvers waves.	a-Mechanical, Longitudinal waves. <input checked="" type="radio"/> b-Electromagnetic, Transvers waves
Media الوسط	<input checked="" type="radio"/> a-need b-not need	a-need <input checked="" type="radio"/> b-not need
Travels media اختر كل إجابة صحيحة	<input checked="" type="radio"/> a-Solid <input checked="" type="radio"/> b-Liquid <input checked="" type="radio"/> c-Gas d- Vacuum	<input checked="" type="radio"/> a-Solid <input checked="" type="radio"/> b-Liquid <input checked="" type="radio"/> c-Gas d-Vacuum