

## Unit 2/ L 2

ST name: .....

4 \ .....

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

1- Substance where sound can travels.

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

3- Back and forth motion.

4- Devices used light from Sun to produce electricity.

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

A-(.....) Sound wave موجة صوت

B-(.....) Vibration اهتزازات

C-(.....) Medium الوسط

موجات طولية

D-(.....) Longitudinal wave

E-(.....) 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

( ..... )

Liquid



Steel Pan

( ..... )

Solid



Wind

( ..... )

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                                                                 | b- Wave                                                                 |
| Wave Type                     | a-Mechanical, Longitudinal waves.<br>b-Electromagnetic, Transvers waves. | a-Mechanical, Longitudinal waves.<br>b-Electromagnetic, Transvers waves |
| الوسط                         | a-need b-not need                                                        | a-need b-not need                                                       |
| Travels media                 | a-Solid b- Liquid<br>c-Gas d- Vacuum                                     | a- Solid b- Liquid<br>c-Gas d- Vacuum                                   |