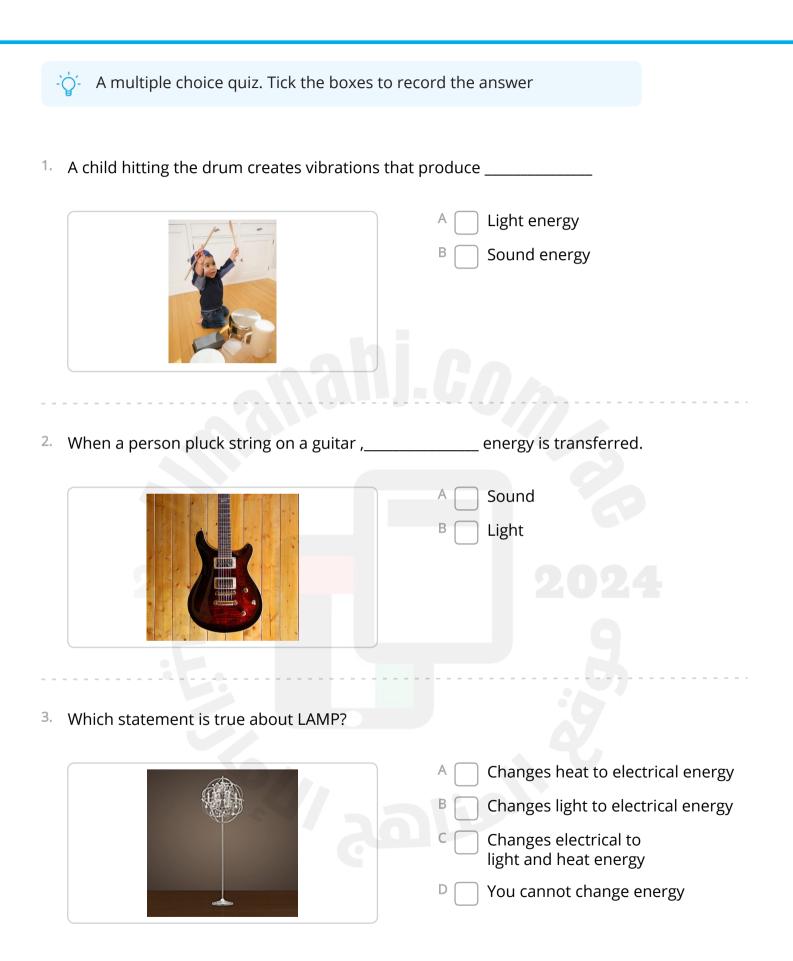


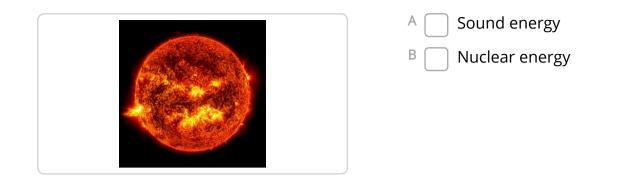
حل أسئلة مراجعة نهائية منهج انسباير	
موقع المناهج ← المناهج الإماراتية ← الصف الرابع ← علوم ← الفصل الثاني ← حلول ← الملف	
تاريخ إضافة الملف على موقع المناهج: 01-03-2025 07:33:56 تاريخ إضافة الملف على موقع المناهج:	
ملفات ا كتب للمعلم ا كتب للطالب ا اختبارات الكترونية ا اختبارات ا حلول ا عروض بوربوينت ا أوراق عمل منهج انجليزي ا ملخصات وتقارير ا مذكرات وبنوك ا الامتحان النهائي ا للمدرس	المزيد من مادة علوم:

	رابع	سف الر	حسب الم	جتماعي ب	سل الا-	التواء	
			7	CHANNEL			صفحة المناهج الإماراتية على فيسببوك
الرياضيات	فة الانجليزية	الل	العربية	اللغة	لامية	ام التربية الاسا	المواد على تلغر

المزيد من الملفات بحسب الصف الرابع والمادة علوم في الفصل الثاني	
أسئلة مراجعة نهائية منهج انسباير	1
حل مراجعة نهائية وفق الهيكل الوزاري	2
أوراق عمل مراجعة منهج انسباير	3
حل أوراق عمل مراجعة عامة	4
أوراق عمل مراجعة عامة	5



#### 4. Nuclear reactions in sun release \_\_\_\_\_



5. A fire truck siren and flashing lights are examples of

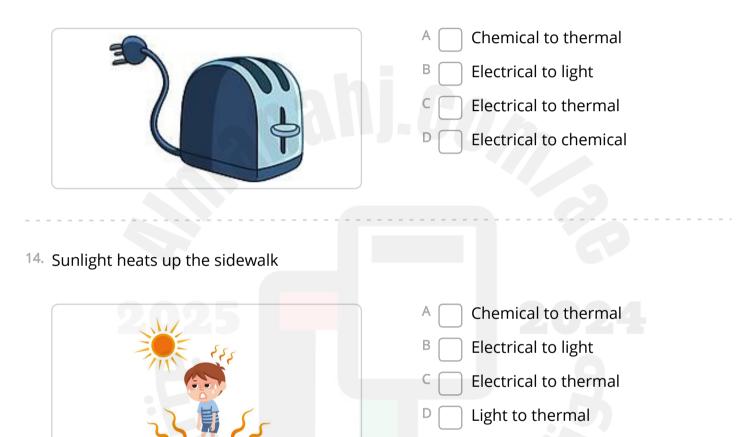
#### Select 2 answers

	<ul> <li>A Heat</li> <li>B Light</li> <li>C Sound</li> <li>D Chemical</li> </ul>
6. To stop a drum producing sound, you need t	A   Hit it harder   B   Hit it softer   C   Stop it from vibrating   Place it in water
7.	<ul> <li>A Chemical energy</li> <li>C Light energy</li> <li>E Sound energy</li> <li>F Thermal energy</li> </ul>





<sup>13.</sup> How energy changes in the TOASTER?

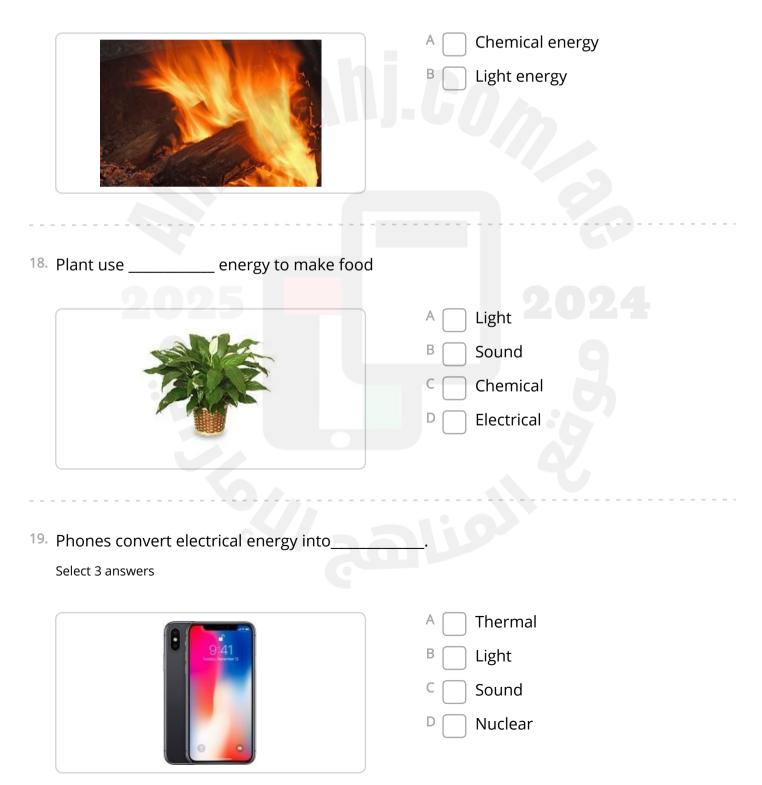


15. Battery powered flashlight



Chemical to electrical
 Electrical to thermal
 Electrical to sound

- <sup>16.</sup> The radio sitting on the table made the water in my glass move. Why?
- Some types of energy cannot transfer through water.
   The sound energy of the radio transferred to the water
   The electrical energy transferred through the water
   Only light can move through water
- 17. Burning wood



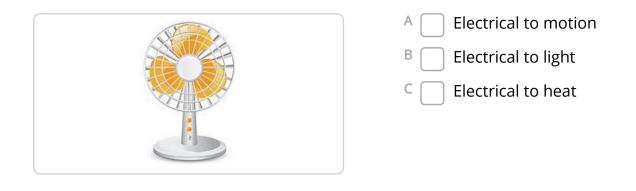
#### 20. Batteries have

		A B C D	Light energy Sound energy Chemical energy Nuclear energy	
21. 9	Select ""stored"" energy			
9	Select 2 answers			
/	Chemical <sup>B</sup> Nuclear <sup>C</sup> energy energy	Electrical energy	D Light energy	E Thermal energy
22. <u>(</u>	Select ""Energy of motion""			
0	Select 3 answers			
	Chemical B Nuclear C energy	Electrical energy	D Light energy	E Thermal energy
23.	A pom pom lancher			
		A	kinetic energy to t kinetic energy to s stored energy to e energy of motion	sound energy energy of motion

<sup>24.</sup> When a student plays guitar, it reaches the ear in form of

	<ul> <li>A Echoes</li> <li>B Potential energy</li> <li>C Thermal energy</li> <li>D Sound waves</li> </ul>
<ul> <li>25. You are asked to design a product that wi</li> <li>A Hairdryer</li> <li>B Alarm clock</li> </ul>	
26. You are watching fireworks. Fireworks giv	e three forms of energy. A Light,sound,electrical B Light,sound,heat C Sound,electrical,mechanical D Heat,mechanical,electrical
27.	<ul> <li>A Difference in the series of t</li></ul>

<sup>28.</sup> Suppose you turn on a fan.Which energy conversion happens inside the motor.



<sup>29.</sup> Energy can be changed from one form to another. Which can change mechanical energy into electrical energy.

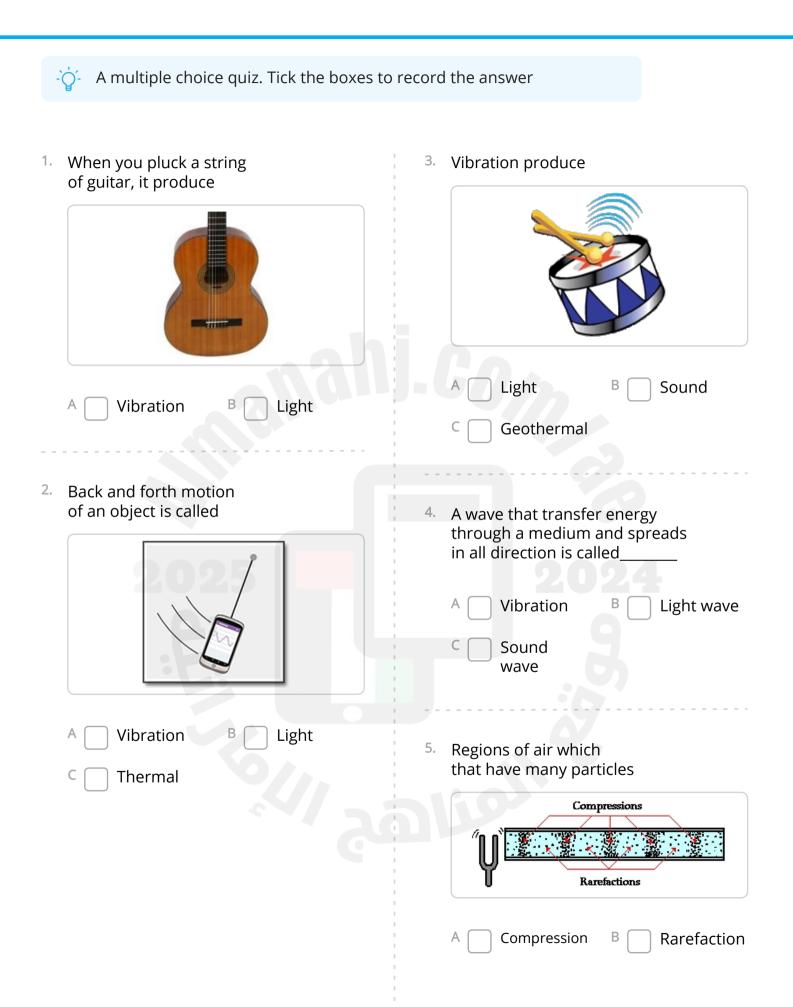


<sup>30.</sup> For a flashlight to turn on: CHEMICAL ENERGY--> ELECTRICAL ENERGY-->LIGHT ENERGY



# SOUND AND LIGHT ENERGY

N	2r	m	۰.
1 1	aı	111	с.



6.	Regions of air which that have fewer particles	9.	2 is
	Compressions Rarefactions A Compression B Rarefaction		
			A Compression B Rarefaction
7.	Sound wave is a series of and	 10.	1 is
	Compression Rarefaction Compression Rarefaction		
	A Compression and rarefactions		8 6 5 3
	B Compression and depressions		
	2025		A Compression B Rarefaction
8.	1 is	11.	2 is
	A Compression B Rarefaction		A Compression B Rarefaction
		12.	The substance through which wave travel is called
			A Medium B Energy

13. Sound travel the fastest in	17. Why are sounds not heard in space?
A Solids B Liquid C Gas	<ul> <li>A Space is too cold for sound waves to travel.</li> <li>B There is too much matter to travel through in space.</li> </ul>
<sup>14.</sup> Sound travel the slowest in	C Space is a vacuum with few particles to travel through.
A Solids B Liquid	D Energy cannot travel in space.
C Gas	
<sup>15.</sup> Sound waves travels in the form of	<sup>18.</sup> Sound travel through outer space.
A Longitudinal waves	A does B does not
<sup>B</sup> Transverse waves	<sup>19.</sup> How does sound energy travel?
16. Astronauts in space cannot talk to each other unless they use a radio to speak back and forth. Why is this?	A   in strings   B   in beams     C   in pulses   D   in waves
<ul> <li>The air is too thick to carry sound waves efficiently.</li> <li>The force of gravity is too strong to allow sound waves to travel.</li> </ul>	20. A form of energy that allows you to see objects is
C There is no air in space, so there is no medium to carry sound waves.	A   Heat   B   Light     C   Solar   D   Vision     energy   Energy   Solar
It is very loud in space, so they can only hear each other through a radio.	<ul> <li>21. Light travels as tiny of energy.</li> <li>A Particles B Pressure</li> </ul>

22. A pom-pom launcher	26. Thermal energy is
A transfers kinetic energy to thermal energy	A the internal energy of an object due to the kinetic energy of its particles
B transforms kinetic energy to sound energy	<sup>B</sup> the external energy of an object due to its potential energy
C transforms stored energy to energy of motion	C the internal energy of an object due to the stored
transfers energy of motion to stored energy	energy of its particles D the external energy of an object
	due to its exposure to the Sun
23 cells are devices that use light from the sun to make electricity	27. Sound energy is a type of
A Solar B Wind	A Stored energy
	B Infrared energy
24. Solar cell are called	C Energy of motion
A Photovoltaic cells	D None of the above
B Phonovoltaic	2024
25. Identify the statement that	<ol> <li>Solar cells convert light energy into energy</li> </ol>
correctly explains what happens when energy transfers in a system.	A Electrical B Sound energy
A About 75% of the energy is transferred, while the rest is destroyed.	29.
<sup>B</sup> All of the energy is transferred in different amounts to different forms.	
C Half of the energy is transferred in different amounts to different forms.	
D Some of the energy gets transferred, while a portion is lost along the way.	A Solar cell B Battery

30.	Solar	cells	need	energy	
-----	-------	-------	------	--------	--

A Sound energy

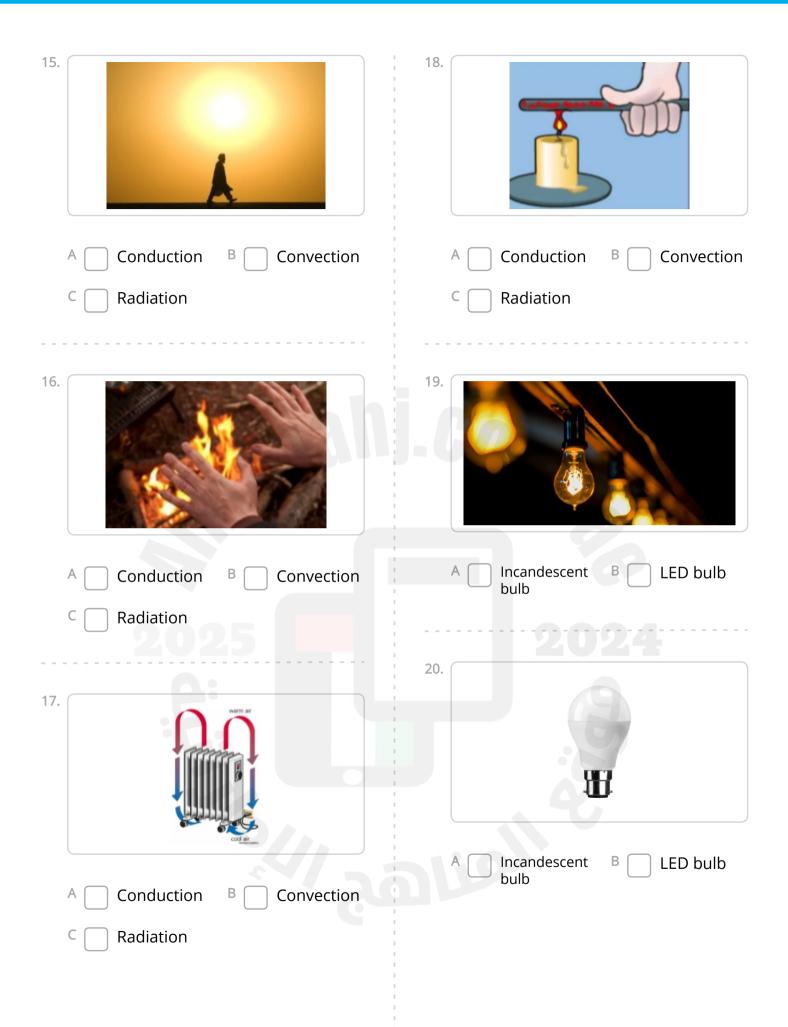
B Light energy

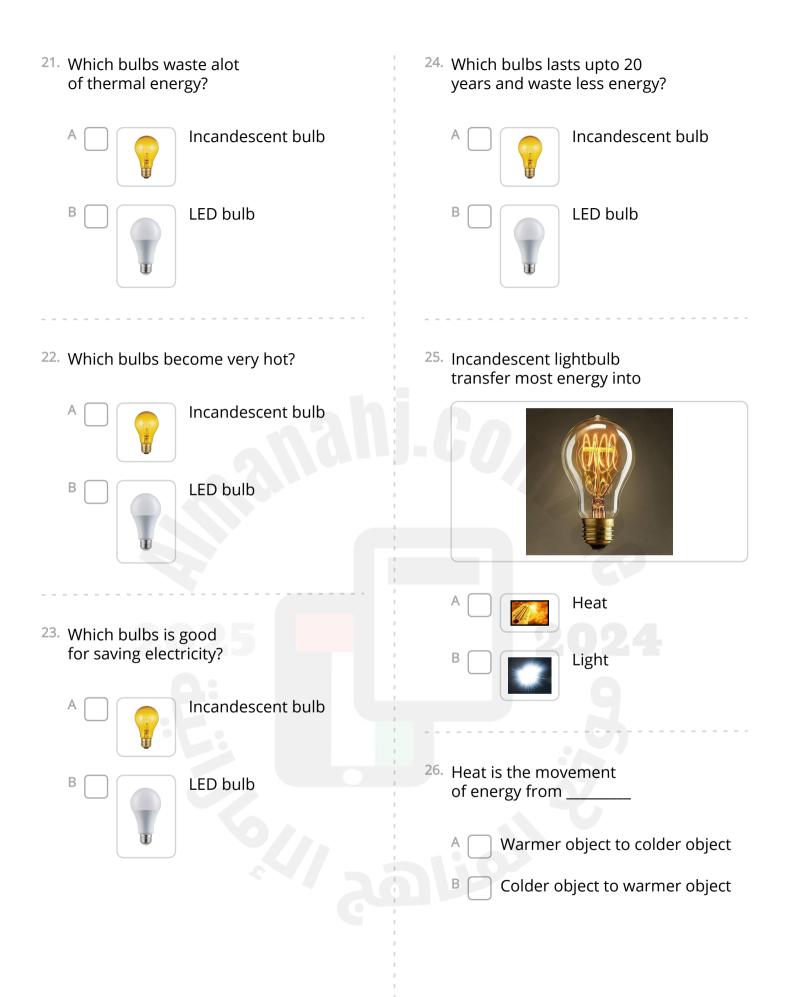


# HEAT

-	္ခ်- A multiple choice quiz. Tick the boxes to	o record the answer
1.	Heat always transfers from to A Warmer,Colder B Colder,Warmer	<ul> <li>5 is excellent thermal conductor</li> <li>A Wood B Plastic</li> <li>C Aluminium</li> </ul>
2.	Heat always transfers from to A Hot,Cold B Cold,Hot	6.
3.	Atransfers heat easily.	A Conduction B Convection
4.	<text></text>	<ul> <li>7.</li> <li>A Conduction B Convection</li> <li>C Radiation</li> </ul>

8.	You are watching fireworks on the fourth of July. When the fireworks are set off, they give off three	<sup>11</sup> When heat transfers when two objects are touching			
	forms of energy. Which three forms of energy are given off?	A Conduction B Convection			
		C Radiation			
		12. When heat transfers without touching			
		A Conduction B Convection			
	A 📄 light, sound, electrical	C Radiation			
	B light, sound, heat				
	c 🔄 sound, electrical, mechanical	<sup>13.</sup> When heat transfers through liquid and gas			
	D heat, mechanical, electrical	A Conduction B Convection			
9.		C Radiation			
		14			
		- Hereard			
	A Conduction B Convection				
	C Radiation				
		A Conduction B Convection			
10.		C Radiation			
	A Conduction B Convection				
	C Radiation				





- 27. LED bulb transfer most energy into Heat Α Light В 28. C D The smoke shows that the А grill is transferring heat energy to cook the food. В The smoke shows that the grill is transferring sound energy to cook the food. С The smoke shows that the grill is transferring electrical energy to cook the food. D The smoke shows that the grill is transferring mechanical energy to cook the food.
  - 29. It is very hot outside and you walk barefoot on hot pavement. Predict what will happen in this scenario.



- The transfer of heat energy from the pavement will cause your feet to feel hot.
  - The transfer of light energy from the pavement will cause your feet to feel hot.
  - The transfer of light energy from the pavement will cause your feet to feel cold.
  - The transfer of heat energy from the pavement will cause your feet to feel cold.

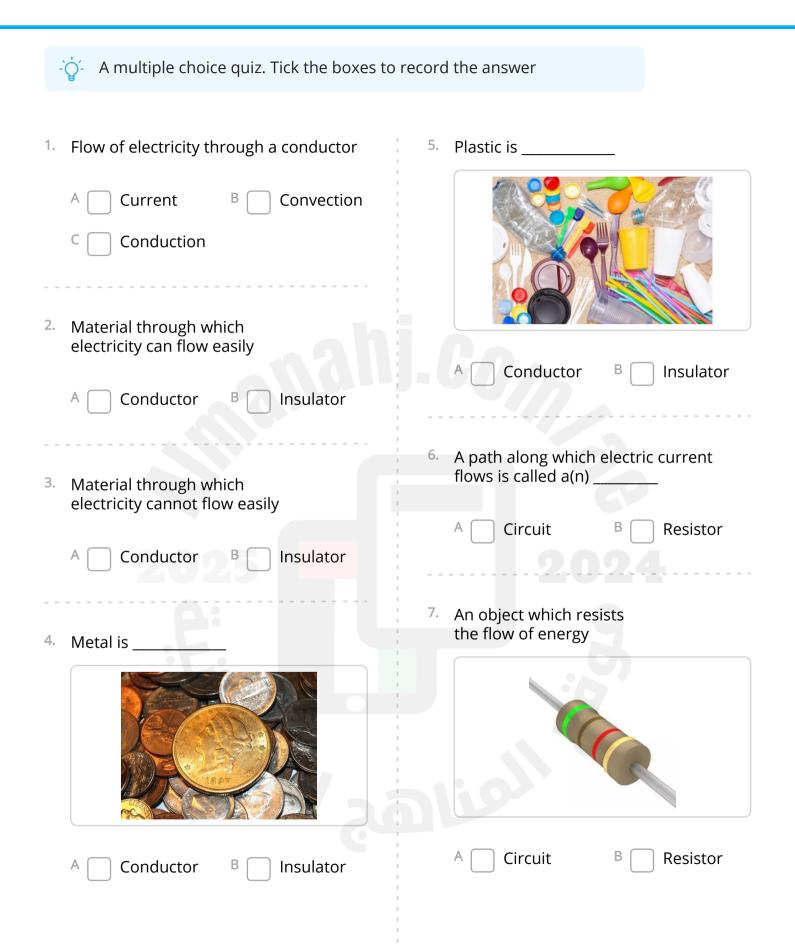
30. A farmer needed to keep his baby chicks warm. He placed a light in their cage. Which sentence best explains the farmer's thinking of placing a light in the cage?



- A The farmer thought the light would transfer thermal energy to the chicks' cage.
- <sup>B</sup> The farmer thought that the chicks would be healthier if they were not in the dark.
- C The farmer thought that the chicks would eat more to stay warm if they can see their food.
  - The farmer thought that the light would encourage the chicks to huddle together to keep themselves warm

D

# Electricity



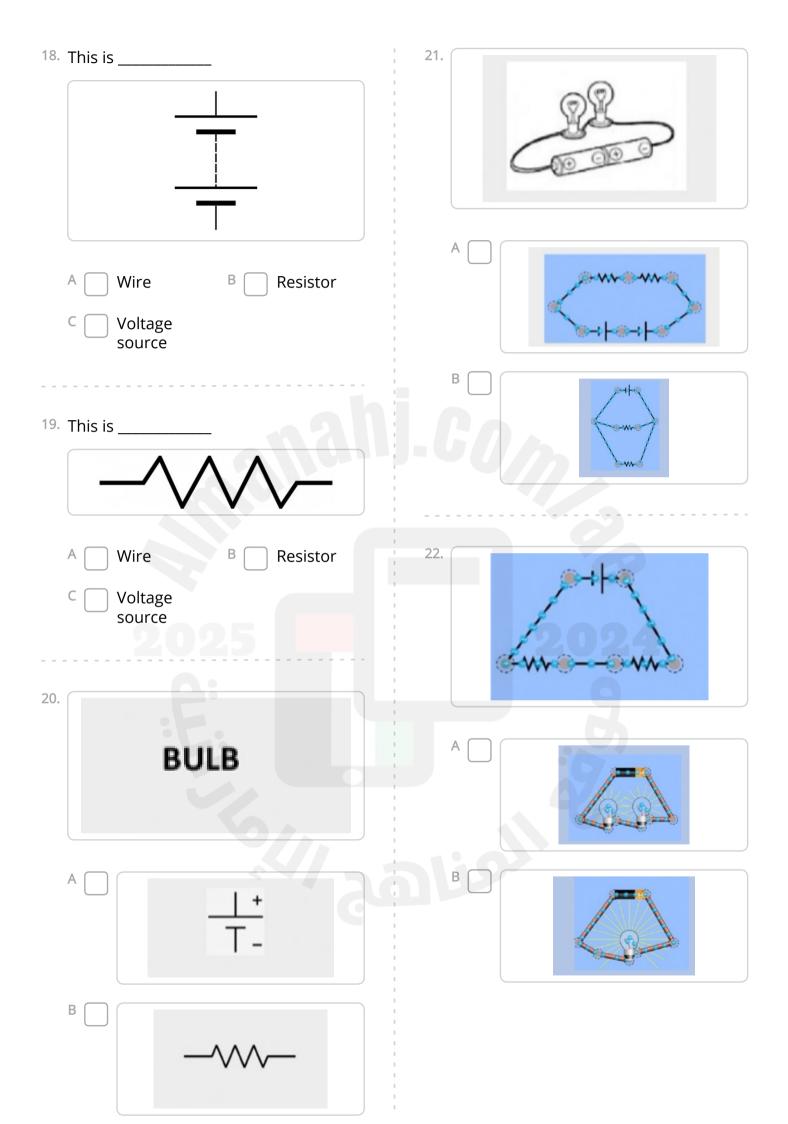
- 8. A fan is plugged into an extension cord. The extension cord is plugged into a wall outlet. How does the extension cord help the fan work?
- electric lectric Fence -----The extension cord makes В Sound A Light the fan more powerful. Current The extension cord makes В the fan easier to operate. С The extension cord transfers 11. In an electric circuit, a battery sound energy to the fan. can act as a D The extension cord transfers electric currents В voltage conductor from the outlet to the fan. source С insulator resistor A flow of electrical 9. charges is known as 12. A conductor is a resistance В electrical current Α a material that increases the number of charged particles С voltage static electricity В material that increases the amount of electricity material through which electricity flows easily D material that stops the flow of energy

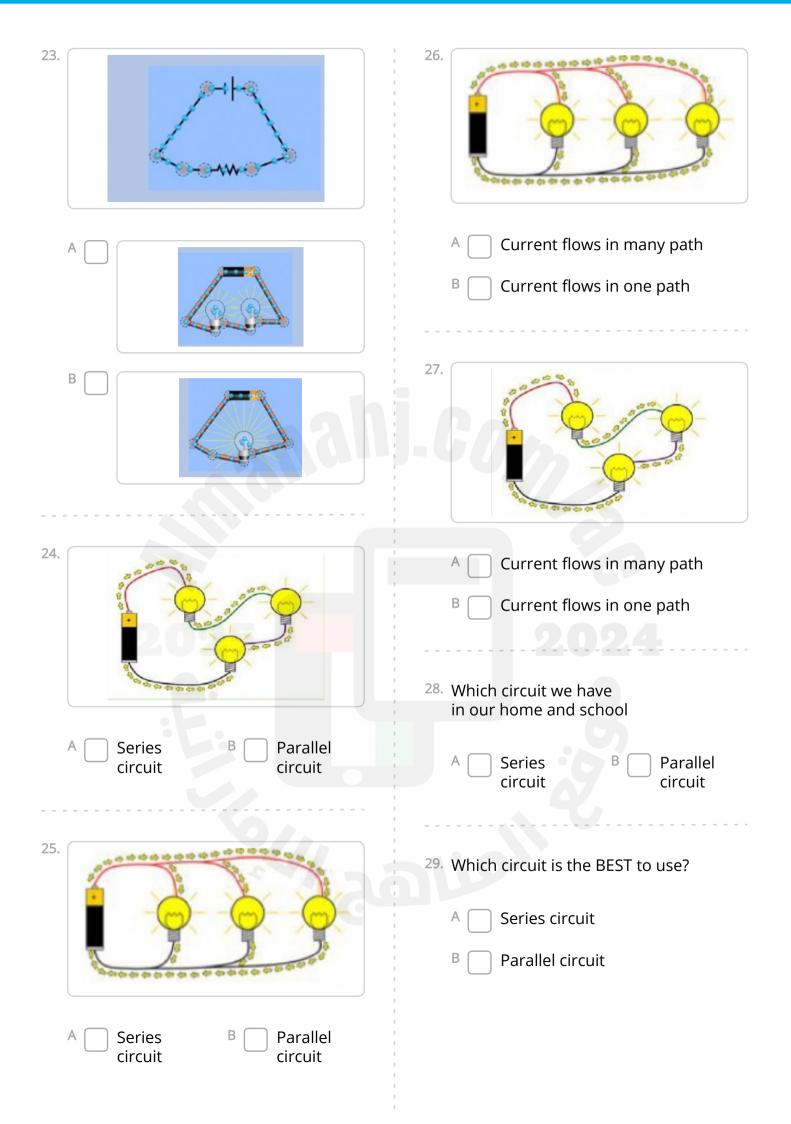
10. An electric fence used to contain

cattle works by transmitting energy

through a conductor creating an

<ul> <li>13. A switch in a circuit</li> <li>13. A switch in a circuit</li> <li>14. If the second sec</li></ul>	16. Amy touched a machine called a Van de Graaf generator. When she touched the generator all of her hair on the top of her head stood up. When she removed her hand from the generator, her hair fell back to its normal state. What conclusion can you draw from Amy touching the generator?
flow of electricity keeps the flow of electricity at a safe level	<ul> <li>Charged particles are being pulled from the air.</li> <li>Charged particles are being pulled from the floor.</li> </ul>
<ol> <li>An object in an electrical circuit that resists the flow of energy is called</li> </ol>	C Charged particles are being destroyed.
A a magnet B a compass	Charged particles are being moved from one object to another.
<ul><li>15. A student made the circuit . What does the student need to add to make the circuit work?</li></ul>	17.
<ul> <li>A Another B Another bulb</li> <li>C Switch</li> <li>B Another wire</li> </ul>	A Wire B Resistor



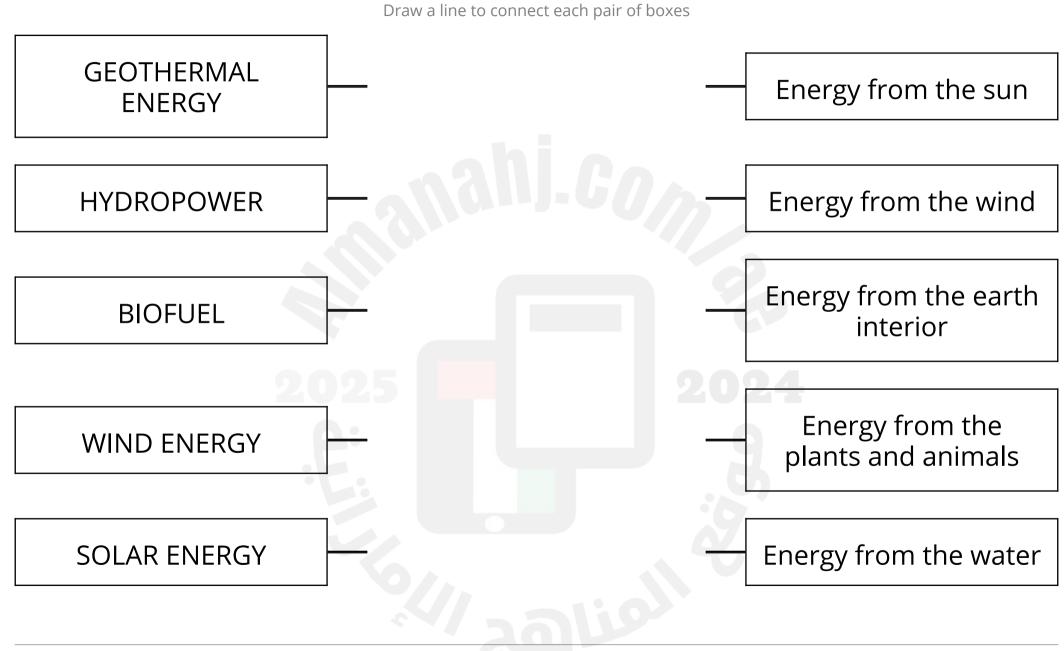




## Renewable and Non-Renewable Resources Name: Tick the box to show which group each item is in Non-Renewable Renewable Renewable Non-Renewable Resources Resources Resources Resources Hydropower 5. Oil 1. Nuclear Energy 6. Solar 2. 3. Coal 7. Wind Natural Gas Geothermal 8. 4.

#### **RENEWABLE RESOURCES**

Name:



### **RENEWABLE RESOURCES**

1.

2.

3.

4.

5.

Energy from the sun A SOLAR ENERGY B WIND ENERGY C GEOTHERMAL EN D HYDROPOWER	ERGY	6.	
Energy from the wind			
A 🔲 BIOFUEL	C 🗌 HYDROPOWER		Α□
B 🔲 SOLAR ENERGY	D 🔲 WIND ENERGY		В
Energy from the earth i	nterior		сП
A 🔲 HYDROPOWER		7.	18
B 🔲 GEOTHERMAL EN	ERGY		
C 🔲 WIND ENERGY			
D			
Energy from the plants	and animals		
	FDCV		
B GEOTHERMAL EN	EKGY		
			B
			сП
Energy from the water		8.	Woo
A 🔲 GEOTHERMAL EN	ERGY		Α□
B 🔲 SOLAR ENERGY			
C 🔲 BIOFUEL		9.	Seleo
D HYDROPOWER			Selec
			в 🗆 С 🗖
		10.	Geot harn surfa
			_

#### Name:



10. Geothermal energy is obtained and used by harnessing the heat from\_\_\_\_\_ Earth's surface.

A Above B Below

#### 2- RENEWABLE RESOURCES

- 1. A device that produces electricity from sunlight is a(n)\_\_\_\_\_
  - A Solar cell B Dry cell
- 2. hydroelectric plant uses alternative energy sources, such as\_\_\_\_\_, to generate electricity.
  - A 🗌 Wind
- B 🗌 Water



Which type of energy would best be used in an area with a lot of hot springs?

- A hydroelectricity
- B 🔲 solar energy
- C 🗌 wind energy
- D 🔲 geothermal energy
- 4. Wind energy, water energy, and solar power are all examples of \_\_\_\_\_\_energy solutions.
  - A 🗌 Renewable or alternate resources
  - B 🔲 Non renewable
- 5. Which is not a source of renewable energy?
  - A 🗌 thermal energy C 🗌 solar energy
  - B i wind energy D i fossil fuels
- 6. Wind energy, harnessed by windmills, is one type of \_\_\_\_\_\_ energy source.
  - A 🗌 nonrenewable 🛛 B 🔲 renewable

- 7. Because it can be replaced quickly in nature, water is considered a(n)
  - A 🔲 nonrenewable 🛛 B 🔲 renewable
- 8. Which method is used to change plant and animal materials into usable fuel?
  - A hydroelectricity
  - B 🔲 recycling
  - C 🔲 biomass conversion
  - D 🔲 solar collection



A 🔲 BIOFUEL

10.

- B 🔲 WIND ENERGY
- C 🔲 GEOTHERMAL ENERGY



- A D BIOFUEL
- C 🔲 GEOTHERMAL ENERGY

# 1-Non-Renewable resources

1.	Fossils fuels are	7.	Coal is mainly used to generate and has been used to power		
	A 🔲 nonrenewable resources		steam locomotives.		
	B 🔲 renewable resources		A 🗌 Electricity 🛛 B 🔲 Sound energy		
	C 🔲 unlimited resources				
	D 🔲 inexpensive resources	8.	Corn, crabs, natural gas, and soybeans are natural resources found in maryland. Which is a nonrenewable resource?		
2.	How are fossil fuels formed?				
	A 🔲 Heat and pressure turn animal and plant remains into fuels.		A Corn C Soybeans		
	B Scientists collect fossils and turn them into fuels.	9.	Nonrenewable resources are resources		
	C 🔲 On the surface of Earth, wind and	5.	that		
	rain turn fossils into fuels. D 🔲 Fossils sink into swamps and take		A 🗌 take so long to form that they cannot be replaced quickly		
	between five and ten years to turn into fuels.		B 🔲 are so plentiful in nature that they can be used without worry		
3.	is pumped out of the ground and can be used for cooking and heating our		C  cause no pollution to the environment, so they are the best kind to use		
	homes		D 🔲 cause so much pollution that they		
	A Crude Oil B Natural Gas		are never used		
4.	Which is not a fossil fuel?	10.			
	A 🗌 Oil C 🗌 Wood				
	B 🗌 Natural gas 🛛 🗌 Coal				
5.	A material that formed from ancient organisms and is used today as a source of energy is				
	A 🔲 fossil fuel		Coal is a nonrenewable natural		
	B 🗌 sediment		resource.Which best describes how humans use coal?		
	C 🔲 alternative energy resource		A 🔲 Humans use coal for food.		
6			B 🔲 Humans use coal for clothing.		
6.	Which is an example of a nonrenewable resource?		C 🔲 Humans use coal for medicine.		
	A 🗌 Wind C 🗌 Oil		D Humans use coal to produce		
	B 🗌 Sunlight 🛛 🗌 Water		electricity.		

### 2-Non-Renewable resources

1.	Select all the natural resources							
	Select 5 answers							
	АП	Air	с 🗆	Tyre	E 🗖	Minerals		
	в 🗖	Coal	D 🗖	Rocks	F 🗖	Plants		
2.	Natu	ral resource i	s som	ething found	in			
	АП	Nature and v	/aluab	le to humans	5			
	в 🗖	Nature and i	nvalua	able to huma	ns			
3.	Noni	renewable re	source	25				
	AП	Cannot be re	eplace	d quickly.				
		Can be repla						
4.	What	is fossil fuels	?					
	Α□	Source of en living organi		nade from th	e rema	ains of ancient		
	в 🗖	Made from g	gas					
5.	Selec	t fossil fuels.						
	Select 3 answers							
	АП	Coal	сП	Petroleum	E 🗖	Wind		
	в 🗖	Natural gas	D	Sun				
6.	(bioma	nuclear 19%	1, 1		25			
	total	d on the "Sou percentage o nerate electri	f nonr	f Electricity" p enewable res	oie gra source	ph, what is the s that are used		
	АП	86% B 🗖	1009	% C 🗖 679	% D	15%		

#### Name:



- A 🔲 Non renewable resources
- B 🔲 Renewable resource
- 8. Select non renewable resource

Select 4 answers

- A 🔲 petroleum
- B 🔲 natural gas
- C 🔲 coal
- D 🔲 uranium(nuclear gas)
- E 🔲 Plants
- F 🔲 Wind
- 9. Coal is used to power
  - A Locomotives and steamboats









Natural gas is used mainly

- A 🔲 For cooking and heating homes
- B 🔲 For making electricity

## 1-IMPACT OF ENERGY USE

1.	Fossil fuels used in transportation can cause	6.	U.S. Energy Consumption		
	problems. Which is a possible solution to these problems?		0il 40.3		
	A 🔲 Use renewable energy sources in cars, such as biofuels and solar power.		Coal 22.6		
	B 🔲 Have car and truck drivers use more fossil fuels in their vehicles during rush hour traffic		Renewable 7.5 Nuclear 6.8 Natural Gas 22.3		
	C 🔲 Make hybrid cars, which use both gas and electricity, illegal.		What percentage of the energy resources used by Americans comes from fossil fuels?		
	D 🔲 Do not build fuel-efficient cars.		A 🗌 7.5 % C 🗌 85.2 %		
			B 🔲 40.3 % D 🔲 93.2 %		
2.	When an item is, it is made into a new product.	7.	Burning oil as fuel can release harmful substances called		
	A 🗌 Reduce B 🔲 Reuse C 🔲 Recycle		A pollution B Electricity		
3.	Using something twice	0			
	A 🗌 Reduce B 🗌 Reuse C 🗌 Recycle	8.	Our society uses up vast amounts of nonrenewable sources of energy. What should we do about energy sources in the future?		
4.	Lessening the amount of something that is used.		A 🔲 Nothing; all energy sources are replaceable.		
	A 🗌 Reduce B 🗌 Reuse C 🔲 Recycle		<ul> <li>B □ We will need to develop new ways of using oil.</li> <li>C □ We will need to develop more technology that relies on fossil fuels.</li> </ul>		
5.	Which is not a source of renewable energy?				
	A 🔲 Geothermal energy				
	B 🔲 wind energy		D 🗌 We will need to find ways to use renewable sources of energy.		
	C 🔲 solar energy				
	D 🔲 fossil fuels	9.	The overuse of fossil fuels leads to		
			A 🗌 flooding C 🗌 fertile soil		
			B pollution D good crops		
		10.	Reducing the amount of resources we use, called, will allow resources to be saved for a later time		
			A $\square$ Consumption B $\square$ conservation		

## Reduce, Reuse, and Recycle

Name:

Tick the box to show which group each item is in									
1.	l turn off the water when l brush my teeth.	Reduce	Reuse	Recycle	7.	l put plastic in the recycling container instead of in the garbage.	Reduce	Reuse	Recycle
2.	I refill my water bottle instead of throwing it away.				8.	l put paper in the recycling container instead of in the garbage.			
3.	l put cans in the recycling container instead of in the garbage.				9.	View of the shorter showers .			
4.	I use a lunchbox instead of a paper bag.	25			10.	I walk to school instead of driving.	02	4	
5.	I turn off the lights when I leave the room.				11.	I write on the back of my paper instead of getting a new one.			
6.	I put cardboard boxes in the recycling container instead of in the garbage.				12.	I donate my old clothes for others to use them.			

Μ	IC GRAW HILL (	QUESTIONS Date:_	Name:						
	်္ပ္- Select the correct	option:							
1.	1. Biomass conversion generates energy from								
	A Plants and animal waste	B 📄 Running water	C Sunlight	D Moving air					
2.	Fossil fuels are a	resource.							
	A 🗌 Renewable	ahi	<sup>B</sup> Non renewable	e resource					
3.	Wind,moving water,so	olar energy,nuclear energ	gy and geothermal ene	rgy are all					
	A Non renewable resources	B Free energy sources	C Fossil fuels	P Renewable resources					
4.	Which is NOT a resou	rce that i <mark>s burne</mark> d to hea	it our homes and give u	is electricity.					
	A 📄 Natural gas	B Coal	C Plastic	P Oil					
5.	Where does geotherm	nal energy comes from?							
	A 📄 Inside earth	B Sun	C 📄 Wind turbines	D Hydroelectric dams					
6.	Lily learned that fossil	fuels contain lots of ene	ergy.Why are fossils kno	wn as non renewable?					
	A It is essential for civilization.	B It cannot be replaced fast enough for future use.	C They are easily renewed.	D They are alternative energy sources.					
7.	Geothermal power pla	ants use from t	he earth interior to ger	ierate power.					
	A 🗌 Heat	B Sound	C 🗌	Light					

8.	Which of the following Select 2 answers	are renewable resourc	es?				
	A Fossil fuels	B Hydroelectricity	C 🗌 Wind energy	/ D Copper			
9.	The act of saving ,prot	ecting or using resource	es wisely is called				
	A Reservation	<sup>B</sup> Generation	C Conservatio	n D Production			
10.	Energy from running v	vater is used to generat	e				
	A Static Electricity	ahl	B Hydroelectri	icity			
11.	Which of the following	; is not an advantage to	renewable energy?				
	A Solar power is abudant as a resource.	B Hydroelectric dams block river and streams.	C Biomass energy uses we products to create energy				
12.	Why is solar power a r	enewabl <mark>e energ</mark> y resou	rce?				
	A lt cannot be used up.	B It is a natural resource.	C It creates extra sunlig	ght. D It creates new sources of gasoline.			
13.	What is one effect of u	ising COAL to meet our	energy needs?				
	A It cleans the air.	B It will not run out.	C It doesnot disturb the wildlife.	D It pollutes the environment.			
14.	14. Which statement is NOT TRUE about Nuclear energy?						
	A Nuclear energy is created using fossil fuels.	B Nuclear energy is a non renewable resource.	C Nuclear energy is used to generate electricity.				