The Vision of the School: Distinct Environment for Refined Education



Work Sheet Science



Name	•	• • •	•	•	••	• •	•	••	•	• •	•	• •	•	• •	•	• •	•	•	••	
El.																				

Unit 3 (Concept 1)

(lesso	<u>n 1)</u>	
[1] Choose the correct answer:		
1- Increasing and decreasing of water le	evel in some lakes is du	e to the transfer
of through the water	cycle.	
a) rocks b) energy	c) work	d) wind
2- In winter, rain falls due to	process.	
a) condensation	b) evaporation	
c) collection	d) precipitation	
3- When water runs through a river the	n into a sea, this step is	called
a) runoff b) conde	nsation	
c) precipitation d) evapo	ration	
4-All the following are considered as the	ne main processes in tra	ansferring water
through water reservoirs, except	••••	
a) condensation.	b) collection.	
b) evaporation.	d) precipitation.	
[2] Write the scientific term of the followi	ng:-	
1- It is the process in which water falls		
snow or hail.	-]
2- It is process in which matter changes	_	
	_]
3- It is the step in which rainwater fallir	•	
different water bodies.	[]
[3] Give reasons for:-		
1- Formation of fog in the early morning.		
•••••	•••••	

[4] What happens to ---?

1- The level of water in a lake when the rate of evaporation increases.

(lesson 2)

<u> 11 Choose inc</u>	e correct answer:			
1- All the fo	ollowing are exampl	es of water reserv	oirs on the Ear	rth, except
a) seas	b) glaciers	c) moon	d) living	organisms
2- The form	of evaporation pro	cess that takes plac	ce from the lea	aves of pants is
called	•••••			
a) transpirat	ion b) collection	on c) melt	ting d) fr	reezing
3- The cond	ensed water vapor i	n clouds returns b	ack to the Eart	th's surface in
the form	of all the following,	, except		
a) water vap	oor b) rain	c) snow	d) sleet.	
	water in clouds bealled	comes too heavy,	it falls on the g	ground by a
a) evaporati	on b) precipita	c) cond	densation	d) collection
[2] Put (√) or	(×):-			
	voirs on the Earth i	nclude oceans and	l seas only.	()
2- The two fac	ctors which control	the movement of v	water in the wa	ater cycle are
gravity forc	e and solar energy.			()
3- Glaciers mo	ove from the top of	mountains to the b	ottom of mou	ntains due to
the effect of	f gravity.			()
4- Water come	es out from stomata	to the air in the fo	orm of water v	apor. ()
5- As a result	of low temperature,	water return back	into water va	por. ()
[3] Give reaso	ns for:-			
1- About 10	0% of water vapor i	n air comes from p	plants.	
2- Formation	on of clouds in the s	ky.	•••••	•••••
[4] What happ	vens if?			
	r touches a cold bot	tle of water.		
• • • • • • • • •				

(lesson 3)

<u>(lesson 3)</u>
[1] Put $()$ or (\times) :-
1- Convection causes the movement of law density air above the high density air
2- The heat of the Sun transfers though space to Earth's atmosphere by convection.
3- The weather in the area near the equator is very cold due to falling of sun rays perpendicular on Earth's surface. ()
4- When the sun rays fall semi-inclined on Earth's surface, they will distribute of a large area giving low effect of heat.
[2] Write the scientific term of each of the following:
 1- The cycle that involves the continuous movement of water from different water bodies to the atmosphere then falling back to the Earth in the form of rain, sleet or snow. [
[3] Complete the following sentences:- 1- Fresh water changes into water vapor when it
[4] Give reasons for:- 1- Hot air moves upward above cold air.

[5] What happens to ---?

1- The weather if the sun rays fall very inclined on an area.

(lesson 4)

[1]C	hoose the corr	ect answer		
		by the help of		
	a) water turbin	e. b) elect	ric generator	
	c) solar radiation	on. d) electric motor.	
2- W	hen warm air c	contains big amount of	of, the	warm air loses it in the
for	m of rain.	_		
	a) ice	b) liquid water	c) sleet	d) water vapor
3- wh	en warm air is	cooled, it will move.		<u>-</u>
	a) upward	b) downward	c) forward	d) backward
4- Th	e air caus	es the formation of ma	any desert areas ar	ound the Earth's surface.
	a) cold	b) moisted	c) dry	d) dusty
	ut $()$ or (\times) :-			
1- Du	e to radiation cu	ırrents, warm water m	oves above cold w	vater. ()
2- De	serts are formed	l by the effect of mois	t air.	vater. ()
3- Un	equal heating of	f the Earth between the	e poles and the equ	ator generates wind. ()
[31 W	rite the scienti	fic term of each of the	he following:-	
				d then replaced by cooler
	that flows from	_	i radiation rises an	
		which is responsible for	r warming of air a	_
2- I t I	s main source w	Then is responsible to	i wariiiiig or air a	[]
3_ I a	rge areas of land	d which are formed du	e to the effect of d	
J- La	ige areas of faire	i willen are formed du	e to the criect of d	[]
				[]
[4] G	ive reasons for			
			ithout shaking, the	e warm water stay above
	ld water without		ζ,	J
2- Th	e formation of	wind is determined by	the amount of so	olar radiation received by
the	Earth.	•		·
<i></i>	71 41 4	<u> </u>		
	<u>hat happens to</u>		T 4	
1- Th	e air temperatur	e if there is no wind or	n Eartn.	
2- Th	e movement of a	air when solar radiatio	n neats up the air i	n an area.
• • • • •		• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	•••••

(Concept 2) (lesson 1)

[1] Put $()$ or (\times) :-
1- The rain never falls on deserts. ()2- The air becomes more dense at the top of the mountain compared to the bottom or
the mountain.
3- Solar energy and wind turbines can be used to operate desert farms. ()
4- Reusing water is a useful way to irrigate crops in desert farms. ()
5- When the hot and humid air meet the cold and dry air, the hot air rises. ()
[2] Write the scientific term of each of the following:-
1- A scientist who studies the atmosphere to understand Earth's weather.
2- A side of mountain ranges at coastal regions that faces the coast.
[
phenomenon occurs. []
[3] Complete the following sentences:-
1- The amount of water that evaporates is than the amount of rain
that falls on deserts.
2- The scientist who studies the Earth's atmosphere is called
3- As you climb to the top of a mountain, the air density will, while
as you move down toward the bottom of it, the air temperature will
4- When the hot and humid air meet the cold and dry air, the air rises.
[4] Give reasons for:-
1- Desert farming faces many difficulties.
O Hat all many and the second of the second
2- Hot air moves up, while cold air moves down.
•••••••••••••••••••••••••••••••••••••••
[5] What happens to?
1- The atmospheric pressure, as we move up toward the top of a mountain.

(lesson 2)

[1] Choose the correct answer:-

1-	The barometer is used	to measure			
	a) air temperature.	b) atmosphe	ric pressure.	c) mass	d) length
2-	Instruments like therm measure weather cond a) satellites b	itions from differ	ent altitudes by	using all of the	ese tool, <u>except</u>
3-	Heat transfers from tha big-small b		•	•	
4-	If the temperature of t°C at night a) 20 b		is 50°C at noo c) 70	_	ure may reach
			0.11		,
<u>[2</u>] Write the scientific te	rm of each of the	e following:-		
	1- The science that stu	idies the weather	conditions.	[]
	2- A device used to m	easure atmospher	ric pressure.	[]
	3- A device used to m	easure temperatu	re.	[]
	4- It is the weight of t	he air above an a	ea.	[]
<u>[3</u>	Give reasons for:-				
	1- At noon, we may n but we can swim in		d barefoot on th	ne sand of a be	ach in summer,
	Swiff in		• • • • • • • • • • • • • • • • • • • •		• • • • • • • • • • • •
[4] What happens to	?			
	1- The temperature of minutes.	water inside a be	aker if we put i	t under a lighte	ed lamp for few
	•••••	••••••	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	•••••
	2- The temperature of	a desert sand at 1	night.		
		• • • • • • • • • • • • • • • • • • • •			•••••

(lesson 3)

1-	The form of ener	gy that flows from	a hot object to a c	old object is ca	lled	energy
	a) sound	b) thermal	c) magr	netic	d) poter	ıtial
2-	convection is a w	ay of transferring	of heat in liquids a	and gasses due	to the diff	erence
	in	and				
	a) mass-color		b) shape-volu	me		
	c) temperature-d	ensity	d) color-temp	erature		
3-	Heat transfers by	convection in	and			
	a) liquids - gasse	es	b) solids - liq	uids		
	c) solids - gasses	i.	d) liquids - sp	vace		
4-	convection curre	nts in the atmosph	nere are controlled	by	••••	
	a) precipitation		b) moon's rota	ation		
	c) the energy fro	m the sun	d) Earth's rota	ation.		
5-	When air is heate	ed, its	changes.			
	a) mass	b) smell	c) color	d) density		
[2] Put (\(\) or (\(\):-					
1-	By increasing the	e temperature of a	ir, its density decr	eases.	()
2-	Convection curre	ents in the atmospl	here are usually co	ontrolled by Ea	arth's rotat	ion.
					()
3-	Transfer of heat	by convection occ	urs in solid, liquid	l and gases.	()
4-	The hand which i	is put over a lighte	d candle feels hot b	because hot air	has high o	lensity
	so it moves up.				()

[3] Complete the following sentences:-
1- The density of hot soup is than that of cold soup.
2- Gasses and liquids expand by and contracts by cooling.
3- When air is heated, it expands as its molecules move each other.
4- The horizontal movement of air is called, whereas the vertical
movement of air is called
[4] Give reasons for:-
1- When air is heated, it expands.
[5] Give reasons for:-
1- We boil water in a pot on the stove. [concerning the movement of hot water and
cold water]

(lesson 4)

] Choose the corre	ct answer:-					
1-	Extreme weather co	onditions include	all the following, ex	<u>cept</u>			
	a) drought	b) flooding	c) sandstorms	d) sunrise			
2-	The increase in the	amount of rain m	nay cause				
	a) flooding	b) drought	c) sandstorm	d) dust storm			
3-	drought affects all	the following, exc	cept				
	a) people	b) plants	c) buildings	d) animals			
4-	Floods may occur a	as a result of	and				
	a) gentle rain – me	lting of snow	b) heavy rai	n – melting of snow			
	c) gentle rain – free	ezing of water	d) heavy rai	n – evaporation of water			
5-	If driver's visibility range in sunny weather is up to 5 km, the visibility range may						
	reach in	stormy weather.					
	a) 1 km or less	b) 6 km	c) 8 km	d) 10 km			
	<i>Write the scientific</i> A phenomenon in			s on the Earth's surface in			
	the form of rain, sn		-	[]			
2-				water in a river increases			
	until it overflows it			[]			
3-				that reduces the visibility			
_	during driving cars		_				

[3] What happens if:-

1- Building when they are subjected to strong floods.
2- Solar panels when dust accumulates on them.

[4] Classify the following extreme weather conditions in Venn diagram below using sentences between brackets:-

[Harmful to habitat – Overflow of water – Shortage of water – Animals and people are affected – The land becomes wet – The land becomes dry]

Flood	Both	Drought
Too much rain	Affected by amount of rain	Too little rain
1	3	5
2	4	6

Unit 4 (Concept 1)

(lesson 1)

[1] Choose the correct answer:

\ . A	All the following are genetic factors to a. size of animal c. body color of animal	that affect living organisms, except b. length of plant d. size of habitat
2.	Thick fur of animals which live in continuous the	
3.	An animal to live and survive, need a. habitat only. c. water only.	s b. habitat and food only. d. water, food and habitat.
4.	Photosynthesis process is affected ba. availability of water only. c. availability of water and light.	•
<u>[2</u>] Complete the following sentences:	·
1.	The place where animals adapted ar	nd live, is known as
2.	The growth and survival of living of	rganisms are affected by
	factors and factors.	
3.	Transferring of falcons and steppe e	eagles to Egypt in winter, is known as
4.	Egypt is an important stopover for r	nigratory birds as it has winter
	climate.	
5.	and ar	re the basic needs for living organisms to
	live and survive.	

[3] What happens if:				
1. The climate in the red sea becomes very cold to the migratory birds.				
2. The environmental conditions changes in migratory birds live.				
[4] Cross out the odd word:				
Size of cat – Availability of water – Body co	olor of gazelle – Length of herbs.			
[5] Give reason for:1. Falcons and eagles migrate to Egypt in wi				
2. Small Dorcas gazelle is similar to its parer				
[6] Write the scientific term of each of the following. A process through which the living organic	Sollowing: sm be able to live and survive in its			
environment.	[]			
2. It is a change in the behaviors or acts of a	living organism to help it survive.			
	[]			
3. It is a change in the body structure of livin	g organisms that helps them to			
survive.	[]			
I. It is a type of behavioral adaptation in which	ch animals move in a certain season			
from one place to another.	[]			

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(lesson 2)

[1] Give reason for:		
1. Arctic fox has a thick white fur.		
	••••	• • •
2. African penguin has a circle of skin that doesn't have any feathers around	d e	acl
of its eyes.		
	••••	•••
[2] Complete the following sentences:		
. The duration of light and its affect the plant's growth.		
. The plants can't grow in the presence of air and water, while		
which considered as one of the is absent.		
. Chrysanthemum plant which considered as one of the can produce	luce	9
when the days are shorter than the nights.		
. Emperor penguin lives in and it has a thick and its sk	in	
covered with dense to keep its body warm.		
. Abiotic factors includes all things.		
[3] Put $(\sqrt{)}$ or (x) :		
1. Ecosystem include nonliving things only.	()
2. The light is one of the abiotic factors, which affects the plant's growth.	()
3. Antarctic is a cold desert biome.	()
4. The intensity and duration of light affect the plant's growth.	()
5. Antarctica is a hot desert biome.	()

[4] Choose from column (B) what suits it in column (A):

(A)	(B)
1. Temperature. ()	a. It is a large ecosystem that has a cold
2. Caribou. () 3. Desert. ()	climate.b. It is one of biotic factors of an ecosystem.c. It is a type of plants that live in desert.
4. Arctic region. ()	d. It is one of abiotic factors of an ecosystem.e. It is a large ecosystem that has a hot climate.

[5] What happens if:

1. The plants in an ecosystem, if they receive too intense light.
2. The living organisms in an ecosystem, if water and light are not available.

(lesson 3)

[1] Give reason for:			
Young sphynx cat doesn't have an			
		••••	•••••
[2] What happens if:			
There are no sanitation services ar			
	••••••	••••	•••••
[3] Complete the following senter			2
1. The response of plant's growth		resp	onse of
factor to abiotic fac	tor.		
2. The emperor penguin is affecte	d by factors differ from	эm	that affect
the African penguin due to the di	ifference of their locations.		
3. Poison dart frog and arctic fox	are affected by different environ	mei	ntal factors
because they live in two differen	t		
[4] Put $()$ or (x) :			
1. Offspring receive their environ	ment factors from their parents.	()
2. Inherited trails carry genes which	ch appear on the offspring.	()
3. Birman cats have long and silky	y hair with different colors.	()
[5] Choose from column (B) wha	t suits it in column (A):		
(A)	(B)		
1- Drinking more soda. ()	a. It is an inherited trait.	_	

2- Difficulty to obtain food. ()

3- Eye color.

b. It is a good lifestyle choice.

affects the human growth.

d. It is a bad lifestyle choice.

c. It is an environmental factor that

Unit 4 (Concept 2)

(lesson 1)

<u>[1] Cnoose ine correct al</u>	<u>nswer:</u>			
1 is the loos		overs the Earth's crus	st.	
a. Humus	b. Water	d. Soil	d. Air	
2. The material rich in n organisms is called	-	duced from the decor	mposition of	dead
a. decomposers		c. sand	d. water	
3. From the components a. living organisms				air
[2] Write the scientific te	erm of each of th	ne following:		
1- The process which	breaks down roc	k into small particles	s.[
2- The spaces between	n soil particles.		[
3- Living organisms h	elp in recycling	nutrients from dead p	olants and an	imals
back to the soil.			[]
4- The building blocks	s of rocks.		[]
[3] Put (√) or (x):				
1-Wind and water help in	n the formation o	of soil.	()
2-Soil contains organic and inorganic ingredients.			()
3-Running water is the or	nly factor that br	eak down rocks caus	ing soil eros	ion.
			()
4-The amount of organic	materials affect	s the type of soil.	()
5-The size of sand partic	les is smaller tha	n silt and clay partic	les. ()
_		<u> </u>		

1-There are many types of soil.
1-There are many types of son.
2-Soil is very important for plants.
••••••
•••••••••••••••••
3-Decomposers have an important role in the formation of soil.
•••••••••••
[5] What happens if:
1-The soil if the temperature in the environment increases.
2- The soil if it doesn't contain any decomposer organisms.
[6] Complete the following sentences:
1. Soil is composed of many inorganic ingredients as,
and
2. According to the size of particles in the soil, are the biggest
particles, while are the smallest particles.
3. Organic material in the soil includes the remains of and
4. Soil is the shelter for many living organisms such as,
and
5. Sand, and particles are products of rocks weathering.

(lesson 2)

[1] Write the scientific term of each of the following:

1. A type of soil that retains medium amount of water ar	nd has medium pore
spaces between its particles.	[]
2. Grassland ecosystems that contain dry sand soil and a	re common in central
Africa.	[]
3. The dark soil that can retain large amount of water.	[]
4. The soil that has large sized particles and its color is y	/ellow. []
[2] Complete the following sentences:	
1. During rainfall, the soil of humid areas retains	amount of water.
2. Herbivores like gazelles can live in ecosyst	tem which has grasses
and small plants.	
3. The moist conditions in bogs lead to very	temperature and they are
suitable for some plants to grow in them.	
4. When water level increases in some humid areas it be	comes soils
that contains a little amount of	
5. Sand soil is and loose soil, so large trees ca	n't grow in it.
[3] Choose the correct answer:1. Waterlogged soil contains amount of air and to grow.a- Large – animals.b- little – animals.c- little – roots.d- large – flowers.	this doesn't help to
2. Savannas are ecosystems. a- Wet polar b- wet grassland c- dry pola	ar d- dry grassland

[4] Give reason for:1. The soil in a bog ecosystem is wet most of time.
2. Large trees can't grow in savanna grassland ecosystems.
3. Water can flow very fast through sand soil.
4. Clay soil can retain more amount of water and air.
[5] What happens if:
1. The soil when there is much water in a wet region.
2. The soil if it has large amount of pore spaces between its particles.

[6] Complete the following table:

Points of comparison	Sand soil	Silt soil	Clay soil
Color			
Size of particles			
Flowing of water			
through it			
Retaining water			

(lesson 3)

[1]	7 Cross	out the	odd	words	or	phrases:
-----	---------	---------	-----	-------	----	----------

1. Hurricanes – Volcanic eruptions – Remove fore fires.	sts to build houses – Forests []
2. Air and water pollution – Overuse of pesticides chemical fertilizer.	– Overgrazing – Overuse of []
3. Drought – Deforestation – Overgrazing – Overu	ise of pesticides.
	[]

[2] Classify the following activities into natural activities and human activities that lead to habitat destruction:

[Hurricane –Building houses – Destructive earthquakes – Floods – Making road and airport runways]

Natural activities	Human activities
•••••	
•••••	
•••••	
•••••	

	[3]	Put	(1)	or	(r	•
1	וטו	ıuı	1 1/	UI I		

1. Climate change is one of results of human activities.	()
2. Changing the habitat can cause extinction of some living organisms.	()
3. The growth of human population makes many changes in a habitat.	()
4 Removing plants leads to the soil erosion.	()

1 Diversity of the second for:
1. Desertification process increases recently.
2. The increase in the inclination of Earth's surface causes the erosion of the soil.
2. The increase in the incrimation of Earth 5 surface enages the crosson of the son
[5] Choose the correct answer:
1. Habitat destruction could happen due to
a- natural changes only. b- natural changes and human activities
c- human activities only. d- overpopulation and increasing the green areas.
2 is from the invasive species that are found in the red sea.
a) Emperor penguin b- Lionfish c- Lizard d- Poison dart frog
3. To reduce the erosion process, we should follow the following ways, except
a- Increasing the planted areas.
b- Digging canals or trenches to collect the excess water in the soil.
c- Adding sand and silt to the soil.
d- Increasing the inclination of the Earth's surface.
a mercusing the memburion of the Burtin 8 surface.
4. Human activities like pollution and waste produced by humans led to the
•
increase in gas percentage and in the Earth's temperature.
a- carbon dioxide – decrease b- oxygen – increase.
c- carbon dioxide – increase. d- oxygen – decrease.
[6] What happens if:
1- The soil when farmers increase the planted areas.
2- The habitat when the number of predators decreases.

(lesson 4)

[1] Put $(\sqrt{})$ or (x): 1- All living organisms depend on soil to get their needs. 2- Controlling air pollution doesn't help in decreasing water pollution. 3- The subsoil which is used for agriculture, is used to make the glue-like building material. 4- Water pollution increases due to the increase in the number of industries which use water. 5- Depending on traditional bricks and concrete cause harms for the environment. [2] What happens if: The sea water if industrial water is thrown into the sea without treatment. [3] Give reason for: 1. We should keep green areas and reduce the amount of fertilizers.

2. Soil scientists and engineers hope to stop using traditional bricks and

concrete in building houses.

[4] Complete the following sentences:
1. Using soil fences and ponds help in reducing pollution
2. To produce traditional bricks and cement, a lot of is required and
lot of is produced.
3. Engineers used the glue-like substance to build homes instead of
bricks.
4. To reduce water pollution, we have to keep green areas, and treat
and industrial water.
[5] Choose the correct answer:
1. The part of the soil which is used to make glue-like substance that bind the
materials together is
a- topsoil only. b- subsoil only.
c- topsoil and subsoil. d- topsoil and groundwater.
2. From the reasons which increase water pollution is
a- Treatment of sewage and industrial water.
b- Getting rid of trash in correct ways.
c- Increasing the industries which use water.
d- Using soil fences and sedimentation ponds.

3. Traditional bricks and concrete must be burned at temperature and

b- high – large

d- low - small

produce amount of pollution.

a- High – small

c-low – large

Revision [1]

(A) Choose from column (B) what suits it in column (A):

(A)	(B)		
1. Condensation	a. falling of snow in an area.		\neg
2. Evaporation	b. formation of fog on a road.		
3. Precipitation	c. formation of a glacier in an area.		
4. Runoff	d. drying of a shallow lake.		
	e. flowing of river's water into a sea.		
1	2		
(B) Give a reason for the	following:		
The effect of heat is low	in the area at the north and south of the equator.		
(A) Post (<) == (10)			X + +
(A) Put (V) or (X):			
received by the Earth.	determined by the amount of solar radiation		
received by the Laith.		()
3 Some animals migrate f	m a dry area such as seas and oceans.	()
4 Getting rid of trash in se	rom one place to another seasonally.	()
prevent water pollution.	as and canals is from the ways to		
		()
(B) What happens to?			
The temperature of a de	sert sand at night.		
(A) Choose the correct ans	wer:		
	rited traits in human, except		
	shape. c. fur color. d. ear shape.		
	sidered as the main processes in transferring wat	er	
a. condensation.	b. collection.		
c. evaporation.			
3. At the top of the mountain	d. precipitation.		
P - i di di C IS	n, the atmospheric pressure is and compared to the bottom of the mountain.		
- lower	b. higher – higher		
c. lower - higher	d. higher - lower		

Revision [2]

1. (A) 1. 2. 3. 4.	in early mornin	ìg.		
(B)	Give a reason for the fo Water can flow fast throug	llowing:		
2 (A)	Correct the underlined v	words:		
1.1	Minerals are the building	blocks of <u>plants</u> .	(,
	Birman cats have very fin	_	()
1	the Earth's surface is kno		()
4.	The heat of the Sun trans atmosphere by convection	fers through space to Earth's n.	()
(B)	What happens to? The density of air if the co	old air is warmed by the effect of solar	energy.	
1. /	Put () or (X): Acacia trees and palms a	re adapted to live in desert environmer	nt. ()
2.	The two factors which cor	ntrol the movement of water in the water	er ,	١
	cycle are gravity force and		,)
	Heavy rain may cause dro The soil can't be restored		ì)
		what suits it in column (A):		
	(A)	(B)		
	1. Acacia tree	a. it has sandy-colored scales.		
	2. Poison dart frog	b. it has thick white fur.		
	3. Emperor penguin	c. it lives in antarctic.		
	4. Arctic fox	d. it lives in desert. e. it lives in tropical rain forest.		
	1	2 3	4	4.5