

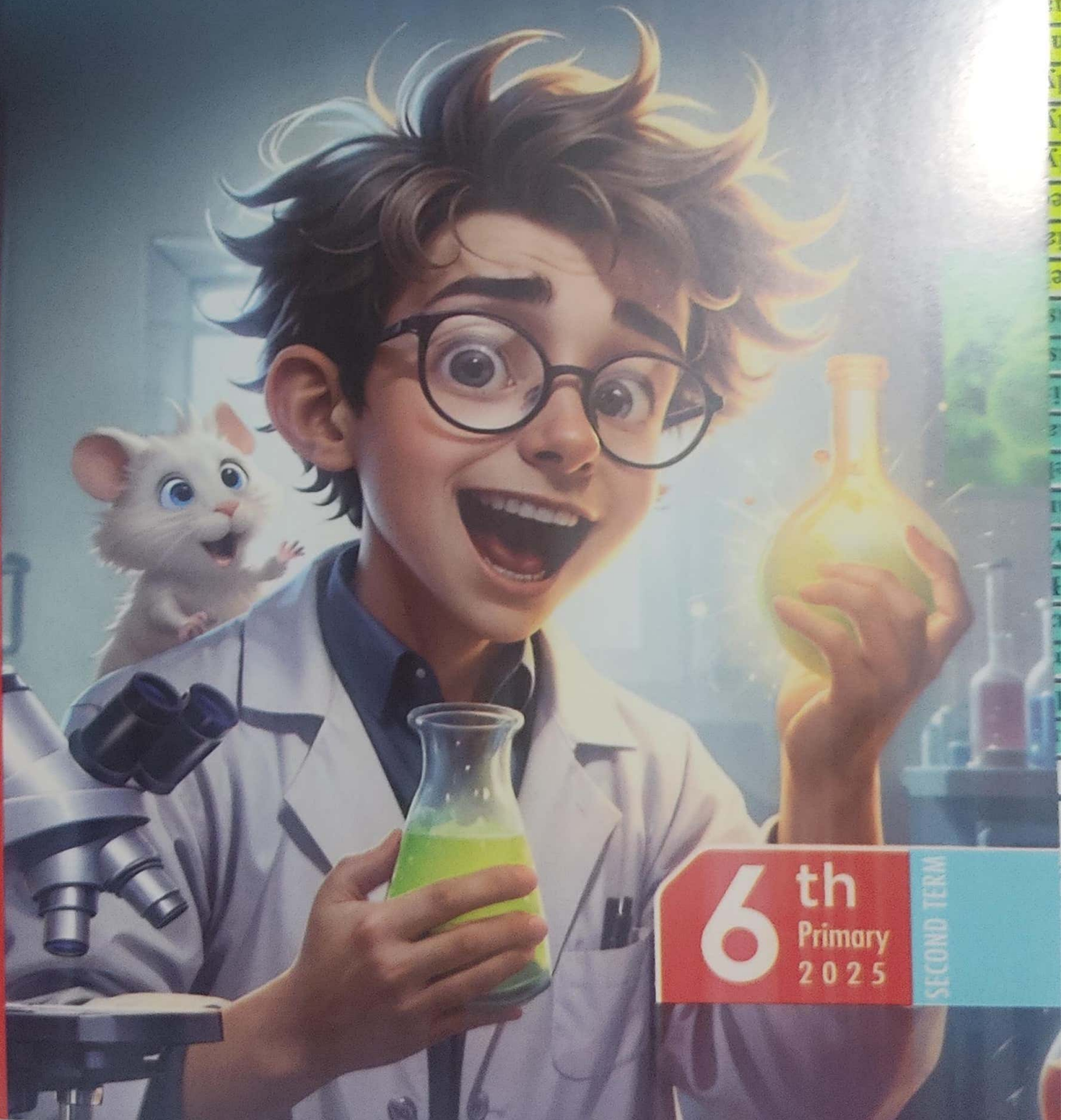
EL-MOASSER

SERIES

SCIENCE

Guide Answers

By A Group of Superheroes



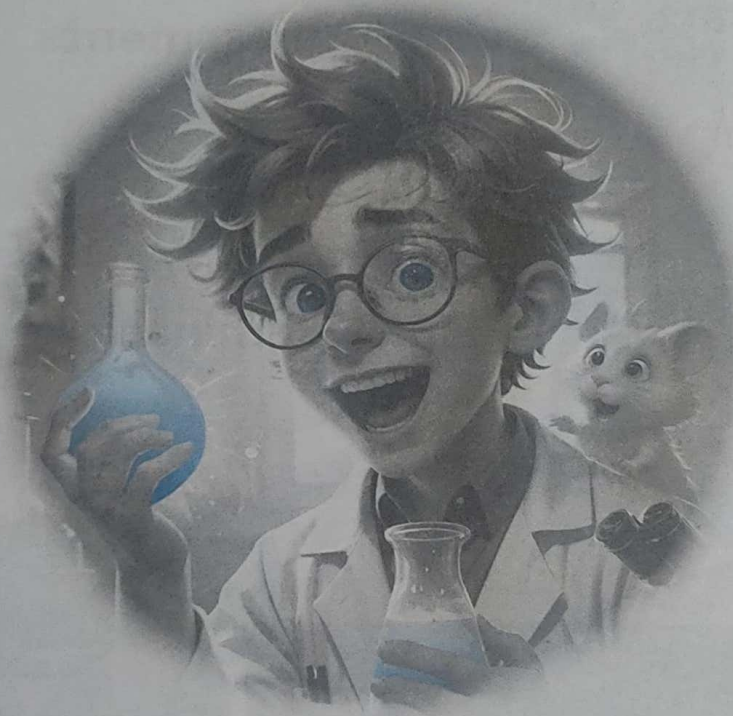
6th
Primary
2025

SECOND TERM

SCIENCE

Guide Answers

By A Group of Supervisors



AL TALABA BOOKSTORE

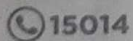
For printing, publication & distribution

El Faggala - Cairo - Egypt

Tel.: 02/ 259 340 12 - 259 377 91

E-mail: info@elmoasserbooks.com

www.elmoasserbooks.com



6th
Primary

SECOND TERM

Contents

Part 1

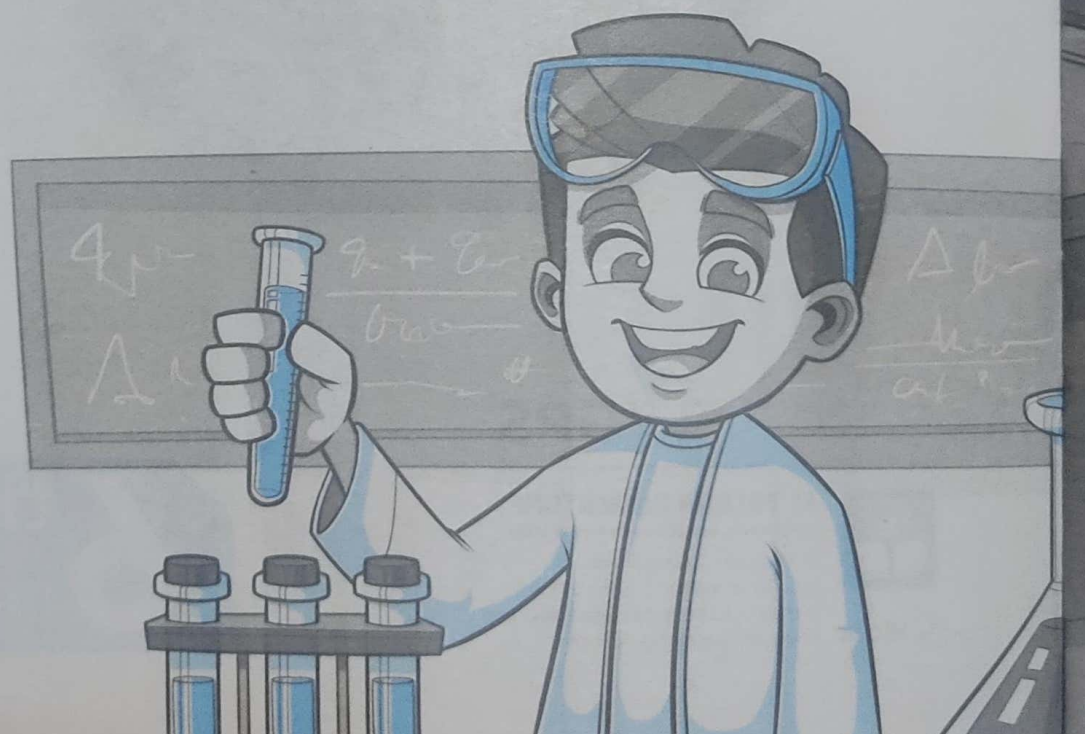
Guide Answers of
Exercises on Lessons (Page 3)

Part 2

Guide Answers of
Self-Assessments (Page 17)

Part 3

Guide Answers of
Final Examinations (Page 23)



PART

1

Guide Answers of Exercises on Lessons



Concept (3.1)

Exercises on Lesson 1

1. 1. c 2. b 3. d 4. a
5. b 6. b 7. c 8. b
9. c 10. a 11. c
2. 1. b 2. d 3. a 4. e
3. 1. (x) 2. (✓) 3. (x) 4. (✓)
5. (x) 6. (✓) 7. (x) 8. (✓)
9. (x) 10. (✓) 11. (x)
4. 1. precipitation 2. sun.
3. collection. 4. evaporation
5. 1. The Sun.
2. Precipitation process.
3. Evaporation process.
4. Condensation process.
5. Runoff.
6. Collection.
6. 1. warm – algae 2. condensation
3. condensation – precipitation.
4. water vapor 5. solar
6. liquid - gas
7. 1. Due to the increase in the evaporation of the lake water.
2. Due to condensation of water vapor that is found in the air.
3. Due to gaining or losing of thermal energy.

8. 1. The level of water will decrease.
2. The snow will melt and change into liquid water.

9. 1. C – D
2. B – E
3. A – F

Exercises on Lesson 2

1. 1. c 2. b 3. c 4. b
5. c 6. c 7. a 8. d
9. b 10. c 11. b 12. a
13. d 14. b 15. c
2. 1. b 2. d 3. a 4. c
3. 1. (✓) 2. (x) 3. (✓) 4. (✓)
5. (✓) 6. (x) 7. (✓) 8. (✓)
9. (✓) 10. (x) 11. (✓) 12. (x)
13. (x) 14. (✓) 15. (✓) 16. (x)
4. 1. collection. 2. precipitation
3. evaporation 4. Gravity
5. 1. Water reservoirs.
2. Gravity.
3. Transpiration process.
4. Condensation process.
6. 1. water cycle. 2. force
3. gravity.
4. evaporation – thermal
5. water vapor. 6. stomata.
7. water vapor 8. clouds.
9. evaporation 10. water
11. precipitation 12. gravity
13. oceans – seas

- 7** 1. Due to the effect of gravity on glaciers.
 2. Due to evaporation process, as a result of gaining of thermal energy.
 3. Due to transpiration process which happens by plants.
 4. Due to condensation of water vapor into water droplets that adhere to particles of dust or smoke in the air.

- 8** 1. Water of seas and oceans changes into water vapor in air.
 2. Water droplets will be formed inside the bag.
 3. Water vapor which is found in air condenses on the surface of the bottle.
 4. Clouds are formed in the sky.
 5. Water droplets fall in the form of rain.

- 9** 1. water cycle.
 2. 1. b 2. b 3. d

Exercises on Lesson 3

- 1** 1. c 2. b 3. d 4. c
 5. b 6. c 7. a 8. d
 9. b 10. d

- 2** 1. c 2. a 3. d

- 3** 1. (✓) 2. (✓) 3. (✓) 4. (✓)
 5. (✗) 6. (✗) 7. (✓) 8. (✓)
 9. (✗) 10. (✓) 11. (✗) 12. (✗)
 13. (✓) 14. (✗)

- 4** 1. radiation. 2. convection.
 3. gravity – ocean currents.
 4. convection currents

- 5** 1. The water cycle.
 2. Convection. 3. Radiation.

- 6** 1. convection
 2. temperature – densities
 3. gains – ice
 4. gravity
 5. very cold – very inclined
 6. density
 7. convection – winds.
 8. above

- 7** 1. Due to the effect of convection, where hot air has less density, so it rises upward, while cold air has more density, so it falls down.
 2. Because the sun rays fall perpendicular on Earth's surface giving high effect of heat.
 3. Because the sun rays fall semi-inclined on Earth's surface of these areas, so the weather is warm.
 4. Because the heat of the Sun causes unequal heating of land and oceans.
 5. Because it provides water for all living organisms and regulates weather on Earth.

- 8** 1. The weather of this area becomes very cold.
 2. The density of the air will decrease (becomes low).

- 9** 1. (✗) 2. (✓) 3. (✓) 4. (✗)

PART 1

Exercises on Lesson 4

- 1 1. c 2. a 3. c 4. a
5. d 6. b 7. c 8. d
9. c
- 2 1. b 2. d 3. a
- 3 1. (✓) 2. (✗) 3. (✓) 4. (✗)
5. (✓) 6. (✓) 7. (✗) 8. (✓)
9. (✗) 10. (✗)
- 4 1. deserts 2. upward.
3. solar radiation
- 5 1. Wind. 2. The Sun.
3. Deserts.
- 6 1. winds – direction
2. solar radiation – rotation
3. rains.
4. downward – upward
5. deserts
- 7 1. Due to the effect of convection, as warm water has less density than cold water, so warm water will stay above cold water.
2. Because warm air rises upward when it is heated by solar radiation and it is replaced by cooler air that flows from nearby areas.
- 8 1. The regions around the equator become extremely hot and the poles will completely freeze.
2. The air will move upward in this area.

- 9 1. The cold air replaces (3)
2. The air is heated (1)
3. The hot air (2)

- 10 1. less 2. solar radiation.
3. more 4. loses

Model Exam (1) on Concept (3.1)

- 1 (A) 1. b 2. c 3. c 4. d
(B) Due to condensation of water vapor into water droplets that adhere to particles of dust or smoke in the sky.
- 2 (A) 1. The water cycle.
2. Transpiration.
3. Wind.
4. Precipitation process.
(B) The regions around the equator become extremely hot and the poles will completely freeze.

- 3 (A) 1. (✓) 2. (✓) 3. (✓) 4. (✗)
(B) 1. b 2. b 3. d

Model Exam (2) on Concept (3.1)

- 1 (A) 1. (✓) 2. (✗) 3. (✓) 4. (✓)
(B) Due to transpiration process which happens by plants.
- 2 (A) 1. d 2. c 3. b 4. a
(B) The snow will melt and change into liquid water.
- 3 (A) a. 1. B
2. Semi-inclined.
b. 1. (✗) 2. (✓)

(B) 1. Water vapor. (all items are forms of precipitation process, while water vapor is a form of evaporation process).

2. Condensation (all items processes gain heat energy but condensation loses heat energy).

Concept (3.2)

Exercises on Lesson 1

1. 1. c 2. a 3. a 4. d
5. a 6. d 7. c 8. b
9. d

2. 1. d 2. c 3. a

3. 1. (✗) 2. (✓) 3. (✗) 4. (✓)
5. (✓) 6. (✗) 7. (✓) 8. (✓)
9. (✗)

4. 1. dry air 2. lower
3. humid air. 4. higher

5. 1. Meteorologist.
2. Rain shadow phenomenon.
3. The wet side.
4. The dry side.
5. Water precipitation.

6. 1. less 2. more
3. atmosphere. 4. higher
5. solar
6. decrease – increase.
7. hot and humid

7. 1. Because the desert's climate is hot and the amount of water is small.
2. Because the air descends on this side and becomes warm causing dryness of the land.
3. Because the hot air has low density, while the cold air has high density.

8. 1. The atmospheric pressure will decrease.
2. The air density will increase.

9. 1. (B) 2. (A) 3. (B)
4. (A) 5. (A)

Exercises on Lesson 2

1. 1. d 2. b 3. d 4. d
5. a 6. b 7. a 8. b

2. 1. (✗) 2. (✗) 3. (✓) 4. (✓)
5. (✗) 6. (✓) 7. (✗) 8. (✓)

3. 1. Meteorology. 2. Meteorologist.
3. Barometer. 4. Thermometer.
5. Atmospheric pressure.
6. Weather map.

4. 1. faster 2. shorter
3. increase 4. slowly.
5. temperature – atmospheric pressure

5. 1. Because sand is heated up faster than water.
2. Due to unexpected quick changes in weather conditions.
3. To measure air temperature at different altitudes.

PART 1

- 6** 1. The temperature of water will increase.
2. The temperature of a desert sand will decrease.

- 7** 1. (x) 2. (x) 3. (✓)

Exercises on Lesson 3

- 1** 1. d 2. b 3. c 4. a
5. d

- 2** 1. b 2. c 3. d

- 3** 1. (x) 2. (✓) 3. (✓) 4. (x)
5. (x) 6. (x) 7. (x) 8. (✓)
9. (✓) 10. (✓) 11. (x) 12. (x)
13. (x) 14. (x)

- 4** 1. Snowfall 2. Air current.
3. Wind. 4. Wather radar.
5. Rain guage. 6. Gravity force.

- 5** 1. density 2. lower
3. heating 4. molecules
5. heated
6. wind – air current.

- 6** 1. Because the molecules of air move away from each other.
2. Because convection currents occur when hot air rises up and cold air falls down.
3. Due to gravity force.

- 7** 1. Hot water moves up and cold water falls down.

2. They are fall down to Earth's surface due to gravity force.
3. They are change into ice crystals that fall to Earth's surface.

- 8** 1. increases 2. decreases.
3. hot – cold 4. vertical
5. horizontal

Exercises on Lesson 4

- 1** 1. c 2. a 3. c 4. b
5. c 6. d

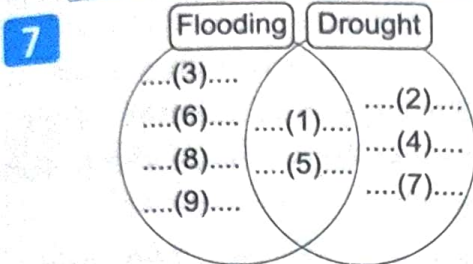
- 2** 1. (x) 2. (✓) 3. (✓) 4. (✓)
5. (✓) 6. (✓) 7. (x)

- 3** 1. Drought. 2. Flooding.
3. Dust storm.

- 4** 1. drought. 2. flooding.
3. increase 4. decrease
5. wet 6. dry

- 5** 1. Due to global climate change.
2. Because some ecosystems depend on floods such as ecosystems along the Nile.
3. Because sandstorms harm the human eyes and respiratory system.
4. Because the ground cannot absorb the water.
5. Because it extends for several kilometers long and its height may reaches hundreds of meters.

- 6** 1. They may be damaged by moving or breaking.
2. Solar panels stop generating energy.



- 8** 1. (✗) 2. (✓) 3. (✗)
4. (✓) 5. (✓)

Model Exam (1) on Concept (3.2)

- 1** (A) 1. c 2. d 3. c 4. d
(B) Because landforms affect the atmosphere.
- 2** (A) 1. (✓) 2. (✗) 3. (✓) 4. (✗)
(B) Atmospheric pressure will decrease.

- 3** (A) 1. Wet side. 2. Barometer
3. Atmospheric pressure.
4. Dust storm.
(B) 1. c 2. b

Model Exam (2) on Concept (3.2)

- 1** (A) 1. d 2. c 3. d 4. d
(B) The air density will increase.
- 2** (A) 1. Water precipitation.
2. Meteorology
3. Wind. 4. Drought.
(B) Because the hot air has low density, while the cold air has high density.
- 3** (A) 2. Air rises. 3. Air cools.
5. Air descends. 6. Air warms.
(B) 1. (✓) 2. (✗)

Concept (4.1)

Exercises on Lesson 1

1. 1. b 2. a 3. d 4. a
5. c 6. b 7. c 8. d
2. 1. d 2. b 3. e 4. a
3. 1. (x) 2. (✓) 3. (✓) 4. (x)
5. (✓) 6. (x) 7. (✓) 8. (✓)
9. (✓) 10. (x) 11. (x) 12. (x)
4. 1. Adaptation. 2. Migration.
3. The Red Sea.
4. Behavioral adaptation.
5. Structural adaptation.
6. Inherited behaviors.
7. Acquired behaviors.
5. 1. genetic 2. cold
3. Red – Nile 4. food – habitats
5. moderate 6. plants
7. genetic 8. genetic
9. structural 10. behavioral
11. photosynthesis.
6. 1. Because they get some genetic factors from their parents.
2. Because Egypt in winter has moderate climate conditions.
3. To search for the best conditions that help them reproduce and preserve their species.
7. They will migrate to another suitable habitat.

8. (A) 1. (✓) 2. (✓) 3. (✓)
(B) a. search for different food resources.
b. search for another suitable habitats.

9. (A) Strong sense of smell - Walk on two legs - Have sharp teeth.
(B) Move in groups – Migration every year.

Exercises on Lesson 2

1. 1. d 2. b 3. c 4. d
5. d 6. d 7. b 8. d
9. c 10. d 11. c 12. c
13. c 14. d 15. b 16. d
2. 1. d 2. e 3. c 4. b
3. 1. (✓) 2. (x) 3. (✓) 4. (✓)
5. (x) 6. (x) 7. (✓) 8. (x)
9. (x) 10. (✓) 11. (✓) 12. (✓)
13. (✓) 14. (✓) 15. (x) 16. (✓)
17. (x) 18. (✓) 19. (x) 20. (✓)
4. 1. arctic – Antarctic
2. abiotic – biotic
3. long – short
5. 1. Ecosystem. 2. Biotic factors.
3. Abiotic factors.
4. Antarctic region.
6. 1. Antarctic – fatty layer – feathers
2. feathers 3. desert

4. leaves – stems.
5. water.
6. thorns
7. plants.
8. biotic – abiotic
9. nonliving
10. animals
11. basic
12. light
13. groundwater

- 7** 1. Frog (All items are found in hot deserts, while frog doesn't live in hot deserts).
2. Air (All items are biotic factors in an ecosystem, while air is an abiotic factor).
3. Plants (All items are abiotic factors in an ecosystem, while plants are biotic factors).
- 8** 1. To help its body cool fast in hot climate.
2. To absorb any available water, and to catch the smallest drops of dew.
3. Because in deserts there are shortage of rain fall for a long time.
4. To protect itself from predators.
5. To hide among rocks in desert.
6. To get the deep groundwater.
- 9** 1. Living organisms can't survive and will die.
2. The too intense light may damage the plant's parts and cause their drying or burning.
3. The two plants will grow with the same rate.

4. It can't keep its body warm at low temperatures.
5. It can't hide in snow.
6. Its body doesn't cool fast at high temperatures.

- 10** 1. (✓) 2. (✓) 3. (✗)
4. (✓) 5. (✓)

Exercises on Lesson 3

- 1** 1. a 2. c 3. d 4. c
5. c 6. b 7. d 8. d
9. c 10. a 11. d 12. a
- 2** 1. c 2. a 3. b
- 3** 1. (✓) 2. (✗) 3. (✓) 4. (✗)
5. (✓) 6. (✓) 7. (✓) 8. (✓)
9. (✗) 10. (✓) 11. (✓) 12. (✗)
- 4** 1. Birman – Sphynx
2. animals – plants
3. environmental – genetic.
- 5** 1. Genetic factor.
2. Birman cats.
3. Sphynx cats.
4. Environmental factors.
5. Genes.
6. Hereditary traits.
- 6** 1. genetic
2. Sphynx
3. long hair – Birman
4. traits.
5. inherited – genes

PART 1

- 7** 1. Because it inherits this trait from its parents.
2. Because it doesn't have the genetic factor for long hair.
3. Because it depends on your behavior which may be good habits or bad habits.

- 8** 1. The trait of hairless body appears on the offspring.
2. The desert plants are more adapted to survive in extreme desert conditions.

- 9** (A) 1. (1) and (3) 2. (2)
(B) 1. (x) 2. (x)
 3. (x) 4. (✓)

Model Exam (1) on Concept (4.1)

- 1** (A) 1. (✓) 2. (x) 3. (✓) 4. (✓)
(B) To absorb any available water, and to catch the smallest drops of dew.

- 2** 1. a 2. a 3. d 4. a
(B) Living organisms can't survive and will die.

- 3** (A) 1. genetic
 2. cold
 3. desert
 4. long hair trait – Birman
(B) 1. Migration.
 2. Antarctic.

Model Exam (2) on Concept (4.1)

- 1** (A) 1. Structural adaptation.
 2. Ecosystem.
 3. Antarctic.
 4. Genes.
(B) It can't hide in snow.

- 2** 1. (x) 2. (✓) 3. (x) 4. (✓)
(B) Because Egypt in winter has moderate climate conditions.

- 3** (A) 1. genetic 2. nonliving
 3. water. 4. Sphynx
(B) 1. Frog (All items are found in hot deserts, while frog doesn't live in hot deserts).
 2. Air (All items are biotic factors in an ecosystem, while air is an abiotic factor).

Concept (4.2)

Exercises on Lesson 1

- 1** 1. c 2. d 3. b 4. d
 5. c 6. a 7. a 8. c
 9. d 10. b 11. d 12. a

- 2** 1. c 2. a 3. b 4. e

- 3** 1. (✓) 2. (✓) 3. (x) 4. (✓)
 5. (x) 6. (✓) 7. (✓) 8. (✓)
 9. (x) 10. (✓) 11. (✓) 12. (✓)
 13. (x) 14. (x)

- 4** 1. Soil. 2. Minerals.
3. Weathering. 4. Decomposers.
5. Humus. 6. Pore spaces.

- 5** 1. color – texture.
2. silt – clay
3. insects – fungi
4. air – water – rocks
5. minerals.
6. weathering – deposition.
7. carbon – oxygen.
8. plants – animals.
9. pore spaces – water – air.
10. sand – clay

- 6** 1. Due to the effect of climate and types of rocks found in this soil.
2. Due to the different amounts of inorganic and organic ingredients that form them.
3. Because soil provides the plants with its basic needs for growth as it contains air, water and nutrients.
4. Because decomposers recycle the remains of dead plants and animals into chemical nutrients such as carbon, nitrogen and oxygen which are released into soil.
5. Because humus increases the soil fertility and helps plants to grow.

- 7** 1. The environment will change leading to death of plants that grow in this environment.

2. The soil will dry and may lose its nutrients.
3. The soil will lose the chemical nutrients that are found in dead plants and animals, so the soil will not be fertile.
4. The rocks are broken down into small pieces such as particles of sand, silt and clay.

- 8** 1. soil.
2. worms – bacteria – water – minerals.
3. remains of dead plants

Exercises on Lesson 2

- 1** 1. c 2. b 3. a 4. a
5. d 6. c 7. b 8. a
9. d 10. b 11. b 12. c
13. d 14. d 15. a 16. d
17. c 18. a

- 2** 1. (x) 2. (x) 3. (x) 4. (✓)
5. (x) 6. (x) 7. (✓) 8. (x)
9. (✓) 10. (✓) 11. (x) 12. (✓)
13. (✓) 14. (✓) 15. (✓) 16. (x)
17. (x) 18. (x)

- 3** 1. medium – large
2. fertile – water. 3. nutrients
4. dry clay 5. herbivores.

- 4** 1. Sand soil. 2. Clay soil.
3. Silt soil. 4. Pore spaces.
5. Savannas.

- 5** (a) Yellow (b) Gray
(c) Large (d) Small
(e) Slow (f) Small
(g) Medium

PART 1

- 6** 1. temperature – weather
2. large 3. waterlogged – air.
4. dry
5. dry grassland – sand
6. savannah
7. cool 8. frogs

- 7** 1. Medium flowing of water (all items are properties of sand soil, while medium flowing of water is property of silt soil).
2. Retaining small amount of water (all items are properties of clay soil, while retaining small amount of water is property of sand soil).
3. Fast flowing of water (all items are properties of silt soil, while fast flowing of water is property of sand soil).
4. Gazelles (all items are carnivores, while gazelles are herbivores).

- 8** 1. Because it has large amount of pore spaces between its particles.
2. Because it keeps its organic materials and this helps in the plant growth.
3. Because it has small amount of pore spaces between its particles.
4. Because its soil is sand soil which is dry and loose that drains water quickly.
5. Because it is rich with clay particles that retain much water very well.

- 9** 1. It allows water to flow fast through it.
2. The soil keeps its organic materials, so it becomes more fertile.
3. The soil becomes waterlogged soil and contains very little amount of air and this doesn't help roots of plants to grow in it.

- 10** (A) 1. clay 2. (2)
(B) 1. (✓) 2. (✓) 3. (x)

- 11** 1. c 2. b 3. b

Exercises on Lesson 3

- 1** 1. c 2. b 3. d 4. d
5. c 6. c 7. d 8. b
9. c 10. d 11. a 12. b
13. d 14. a 15. c 16. c

- 2** 1. (✓) 2. (✓) 3. (x) 4. (✓)
5. (✓) 6. (✓) 7. (x) 8. (✓)
9. (✓) 10. (✓) 11. (x) 12. (✓)
13. (✓) 14. (x) 15. (✓) 16. (✓)

- 3** 1. increase. 2. erosion
3. deforestation – desertification
4. pesticides – chemical fertilizers
5. straw – stems 6. silt – water
7. water – shelter
8. forest – stream – grassland.
9. habitat.
10. hurricanes – floods
11. invasive
12. carbon dioxide – temperature.
13. deforestation.

- 4** 1. Overuse of pesticides (all items are the reasons of desertification, while overuse of pesticides causes depletion of the soil).
 2. Overgrazing (all items cause soil depletion, while overgrazing causes desertification).
 3. Converting fertile agricultural lands into cities. (all items help in soil restoration except converting fertile agricultural lands into cities).
 4. Remove forests to build houses. (all items are from natural changes that lead to habitat destruction, while remove forests to build houses is from human activities).

- 5** 1. Because the speed of moving water over the land increases so the soil particles are washed down by moving water.
 2. To add nutrients to the soil, so the soil can be restored.
 3. Due to deforestation, drought and overgrazing.
 4. Because forest fires can release seeds from closed fruits.

- 6** 1. Soil depletion may happen.
 2. The fertility of the soil will increase, so the soil can be restored.

3. The number of preys increases greatly and this leads to the lack of resources in this habitat so it causes habitat destruction.
 4. They change their behaviors to adapt to their new habitats.

7

Natural activities	Human activities
– Hurricanes. – Floods. – Destructive Earthquakes.	– Building houses. – Making road and airport runways.

- 8** 1. desertification – infertile – deserts.
 2. deforestation – overgrazing.
 3. Straw – stems – animals manure.

Exercises on Lesson 4

- 1** 1. d 2. c 3. b 4. d
 5. b 6. b 7. b

- 2** 1. (✓) 2. (✓) 3. (✓) 4. (✗)
 5. (✗) 6. (✗) 7. (✗) 8. (✓)
 9. (✓) 10. (✗) 11. (✗)

- 3** 1. sewage
 2. sedimentation – water
 3. traditional
 4. energy – pollution
 5. chemical – subsoil.
 6. sustainable – traditional

PART 1

- 4 1. To reduce water pollution.
2. Because they need large amount of energy to be manufactured and produce a lot amount of pollution.

- 5 The sea water will be polluted.

- 6 (A) 1. (✓) 2. (✓) 3. (✗)
(B) 1. sewage – industrial
2. soil – sedimentation

- 7 1. traditional bricks.
2. pollution.
3. glue-like substance – chemical – subsoil

Model Exam (1) on Concept (4.2)

- 1 (A) 1. d 2. b 3. c 4. c
(B) Because soil provides the plants with its basic needs for growth as it contains air, water and nutrients.
- 2 (A) 1. (✗) 2. (✓) 3. (✓) 4. (✗)
(B) The soil will dry and may lose its nutrients.

- 3 (A) 1. Pore spaces. 2. Habitat.
3. Clay soil. 4. Savannas.
(B) Remove forests to build houses (all items are from natural changes that lead to habitat destruction, while remove forests to build houses is from human activities).

Model Exam (2) on Concept (4.2)

- 1 (A) 1. nature. 2. dead animals
3. nutrients 4. larger
(B) Because humus increases the soil fertility and helps plants to grow.
- 2 (A) 1. d 2. d 3. b 4. b
(B) The soil becomes waterlogged soil and contains very little amount of air and this doesn't help roots of plants to grow in it.
- 3 (A) 1. chemical 2. inorganic
3. sand 4. restoration
(B) 1. (✓) 2. (✓) 3. (✗)

PART 2

Guide Answers of
Self-Assessments



Concept (3.1)

Self-Assessment 1

- 1 (A) 1. energy. 2. evaporation
3. solar
(B) Due to the increase of evaporation process of the lake water.
- 2 (A) 1. (x) 2. (x) 3. (✓)
(B) Flamingos will not migrate to this lake.
- 3 1. (x) 2. (✓) 3. (x)

Self-Assessment 2

- 1 (A) 1. a 2. d 3. b
(B) Because ice gains thermal energy, so it melts and changes into liquid water.
- 2 (A) 1. Runoff. 2. Stomata.
3. The water cycle.
(B) The water in the lake will evaporate and this lake becomes dry.
- 3 (1) transpiration – stomata.
(2) 1. b 2. c

Self-Assessment 3

- 1 (A) 1. gains 2. deserts
3. loses
(B) Because the sun rays fall very inclined on Earth's surface in this area giving the lowest effect of heat.

- 2 (A) 1. (x) 2. (✓) 3. (✓)
(B) Water vapor condenses forming clouds.

- 3 1. warm. 2. B 3. C

Self-Assessment 4

- 1 (A) 1. Gravity 2. rain. 3. thermal
(B) Due to the decrease in the density of air when it is warmed as a result of convection.
- 2 (A) 1. Gas state.
2. Condensation process.
3. Cloud.
(B) The density of air will decrease so the air will move upward.
- 3 1. condensation
2. water which is found in the pot.
3. clouds in the sky.

Model Exam on Concept (3.1)

- 1 (A) 1. water vapor 2. solar
3. density 4. rain.
(B) Due to the effect of convection, where hot air has less density, so it rises upward, while cold air has more density, so it falls down.
- 2 (A) 1. radiation. 2. dry
3. warm 4. water vapor.
(B) Water droplets will be formed inside the bag.

- 3 (A) 1. b 2. d 3. a 4. e
(B) 1. (x) 2. (✓) 3. (✓)

Concept (3.2)

Self-Assessment 5

- 1 (A) 1. b 2. a 3. b
(B) To deal with the problem of water shortage.
- 2 (A) 1. (x) 2. (✓) 3. (✓)
(B) Deserts farming will be easier.
- 3 1. (✓) 2. (x) 3. (x)
4. (✓) 5. (✓) 6. (✓)

Self-Assessment 6

- 1 (A) 1. Atmospheric pressure.
2. Humidity.
3. Weather balloon.
(B) Because they are used to measure atmospheric pressure.
- 2 (A) 1. (x) 2. (✓) 3. (✓)
(B) Air density will decrease.
- 3 1. pressure. 2. temperature
3. density

Self-Assessment 7

- 1 (A) 1. humidity. 2. wind
3. desert
(B) Because the molecules of air come near to each other.

- 2 (A) 1. (x) 2. (x) 3. (✓)
(B) The gravity pulls these water droplets toward the ground, so precipitation occurs.

- 3 1. b 2. c 3. d

Self-Assessment 8

- 1 (A) 1. heavy 2. dry
3. atmospheric pressure
(B) Because sand reduces the visibility during driving cars.
- 2 (A) 1. (✓) 2. (x) 3. (x)
(B) The water quality inside the irrigation canal will decrease.
- 3 1. (x) 2. (x) 3. (✓)

Model Exam on Theme (3)

- 1 (A) 1. c 2. b 3. a 4. d
(B) Due to condensation of water vapor that is found in the air.
- 2 (A) 1. (✓) 2. (x) 3. (x) 4. (✓)
(B) The air density will increase.
- 3 (A) 1. Meteorology.
2. Atmospheric pressure.
3. Water reservoirs.
4. Runoff.
(B) 1. convection current.
2. wind

Assess Your Learning on Theme (3)

1. d 2. c 3. d 4. c 5. d
6. c 7. a 8. b 9. a 10. a
11. a 12. d 13. a 14. a 15. b

PART 2

UNIT FOUR : Adapting to Change

Concept (4.1)

Self-Assessment 9

- 1 (A) 1. a 2. d 3. d
(B) Availability of water.
- 2 (A) 1. (✓) 2. (✗) 3. (✗)
(B) They will not migrate to it in winter season.
- 3 1. migration. 2. habitat.
3. environmental – genetic

Self-Assessment 10

- 1 (A) 1. b 2. c 3. d
(B) To warm its body.
- 2 (A) 1. (✗) 2. (✓) 3. (✓)
(B) 1. d 2. b 3. e 4. a
- 3 1. light – abiotic factors.
2. intensity
3. biotic factors – flowers.

Self-Assessment 11

- 1 (A) 1. (✗) 2. (✗) 3. (✓)
(B) Because it receives the gene of hairless body trait from its parents.
- 2 (A) 1. environmental.
2. habitats
3. biotic
(B) Spreading of different diseases.

- 3 1. d 2. c 3. a

Model Exam on Concept (4.1)

- 1 (A) 1. c 2. d 3. c 4. c
(B) To help its body cool fast in hot climate.
- 2 (A) 1. Genes.
2. Adaptation.
3. Ecosystem.
4. Environmental factors.
(B) They will migrate to another suitable habitat.
- 3 (A) 1. (✓) 2. (✗) 3. (✗) 4. (✓)
(B) 1. d 2. e 3. c 4. b

Concept (4.2)

Self-Assessment 12

- 1 (A) 1. (✗) 2. (✓) 3. (✓)
(B) Because soil is important for the plants that animals feed on to survive and also it is the home of many different living organisms.
- 2 (A) 1. rocks. 2. decomposers.
3. weathering
(B) 1. Air (all items are organic components of the soil, while air is from the inorganic components).
2. Melting (all items are the processes that help in soil formation, while melting isn't)

3	Organic ingredients	Inorganic ingredients
	- Worms	- Air
	- Insects	- Water
	- Remains of dead plants	- Rocks
		- Minerals

Self-Assessment 13

- 1** (A) 1. c 2. a 3. c 4. d
 (B) Water and air will flow very slowly and this doesn't help roots of plants to grow.

- 2** (A) 1. humus
 2. lions – herbivores
 3. mosquitoes
 (B) Because it has large particles of sand and have very large pore spaces.

- 3** 1. sand – yellow.
 2. silt – (2)

Self-Assessment 14

- 1** (A) 1. Clay soil.
 2. Habitat.
 3. Desertification.
 (B) 1. natural changes
 2. Minerals

- 2** (A) 1. (✓) 2. (✗) 3. (✓)
 (B) Because they clean the environment by decomposing the dead organisms.

- 3** 1. b 2. d 3. a

Self-Assessment 15

- 1** (A) 1. (✓) 2. (✗) 3. (✗)
 (B) The quality of tomato crops increases.

- 2** (A) 1. Keeping green areas
 2. desertification
 3. water.
 (B) Because they harm the environment as the production of them produce a lot of pollution.

- 3** 1. c 2. a 3. d

Model Exam on Theme (4)

- 1** (A) 1. (✓) 2. (✓) 3. (✓) 4. (✗)
 (B) The number of prey increases greatly which leads to lack of resources in this area so habitat will be harmed.

- 2** (A) 1. weathering process.
 2. Antarctic – fatty layer
 3. forests – streams.
 4. genetic
 (B) Because Egypt in winter has moderate climate conditions.

- 3** (A) 1. c 2. d 3. a 4. d
 (B) 1. d 2. b 3. e 4. a

Assess Your Learning on Theme (4)

1. b 2. c 3. d 4. d 5. b
 6. b 7. d 8. a 9. b 10. d
 11. a 12. c 13. a 14. a 15. b
 16. d 17. c

Monthly Tests

March Tests

Model 1

- 1 (A) 1. d 2. c 3. c 4. b
(B) Because air molecules move away from each other.
- 2 (A) 1. Drought. 2. Meteorologist.
3. Transpiration.
4. Water cycle.
(B) The atmospheric pressure will decrease.
- 3 (A) 1. (✓) 2. (✓) 3. (✗) 4. (✗)
(B) Due to the effect of gravity on glaciers.

Model 2

- 1 (A) 1. smaller 2. faster
3. deserts 4. condensation
(B) 1. b 2. c
- 2 (A) 1. (✓) 2. (✗) 3. (✓) 4. (✗)
(B) 1. Water vapor. (all items are forms of precipitation process, while water vapor is a form of evaporation process.).
2. Condensation (all items are processes that gain heat energy but condensation process loses heat energy).
- 3 (A) 1. Gravity.
2. Rain shadow phenomenon.
3. Stomata. 4. Clouds.
(B) 1. warm 2. B

Model Answers

April Tests

Model 1

- 1 (A) 1. Behavioral adaptation.
2. Ecosystem.
3. Hereditary traits.
4. Savannas.
(B) Because they don't have the genetic factor of long hair.
- 2 (A) 1. (✓) 2. (✓) 3. (✗) 4. (✗)
(B) The soil will dry and may lose its nutrients.
- 3 (A) 1. feathers 2. frogs
3. genetic 4. minerals.
(B) Air. (All items are biotic factors, while air is an abiotic factor in an ecosystem).

Model 2

- 1 (A) 1. a 2. b 3. d 4. c
(B) It can't keep its body warm at low temperatures.
- 2 (A) 1. (✓) 2. (✓) 3. (✗) 4. (✓)
(B) Because decomposers recycle the remains of dead plants and animals into chemical nutrients such as carbon, nitrogen and oxygen that are released into soil.
- 3 (A) 1. d 2. e 3. c 4. b
(B) Retaining small amount of water (All items are properties of clay soil, while retaining small amount of water is a property of sand soil).

PART **3**

Guide Answers of
Final Examinations



PART 3

Model Examinations

El-Moasser Final Examination Models

Model Exam 1

- 1 (A) 1. b 2. a 3. b
(B) Due to the effect of gravity on glaciers.
- 2 (A) rocks.
(B) 1. condensation – water vapor
2. pesticides – chemical fertilizers
- 3 (A) Runoff. (All items are processes while runoff is a step).
(B) 1. Gravity.
2. The soil.

Model Exam 2

- 1 (A) 1. (✓) 2. (✓) 3. (✗)
(B) Soil depletion may happen.
- 2 (A) Sand soil – Silt soil – Clay soil
(B) 1. Because the desert's climate is hot and the amount of water is small.
2. To hide among rocks in desert.
- 3 (A) C.
(B) 1. increases
2. decreases
3. hot – cold

Model Exam 3

- 1 (A) 1. density 2. erosion
3. transpiration.
(B) The atmospheric pressure will decrease.
- 2 (A) (✓)
(B) 1. Structural adaptation.
2. Decomposers.
- 3 (A) ice.
(B) 1. Hot air moves up.
2. Cold air falls down.

Model Exam 4

- 1 (A) 1. d 2. a 3. d
(B) It is used to measure the wind speed.
- 2 (A) (✗)
(B) 1. Collection.
2. Meteorologist.

- 3 (A) Silt
(B) 1. leaves – stomata
2. water – sewage

Model Exam 5

- 1 (A) 1. c 2. d 3. b
(B) fast – clay
- 2 (A) Thermometer. (All items are tools that are used to carry measuring instruments except thermometer).

- (B) 1. The too intense light may damage the plant's parts and cause their drying or burning.
2. Hot water moves up and cold water falls down.

- 3 (A) (✗)
(B) 1. clay 2. (2)

Model Exam 6

- 1 (A) 1. weathering
2. Sphynx.
3. humidity.
(B) The regions around the equator become extremely hot and the poles will completely freeze.

- 2 (A) (✗)
(B) 1. Natural changes.
2. Human activities.

- 3 (A) 1. c 2. a
(B) 1. Runoff.
2. The Red Sea.

Model Exam 7

- 1 (A) 1. (✓) 2. (✓) 3. (✓)
(B) To reduce water pollution.

- 2 (A) b
(B) 1. It measures the temperature.
2. It measures the amount of rain in a certain area.

- 3 (A) natural activities
(B) 1. b 2. c

Model Exam 8

- 1 (A) 1. a 2. a 3. c
(B) Due to the increase in the evaporation of the lake water.

- 2 (A) (✗)
(B) 1. Behavioral adaptation.
2. Weathering process.

- 3 (A) radiation.

(B)

Type of soil	Sand soil	Clay soil
The size of particles :	Large.	Small.

Model Exam 9

- 1 (A) 1. rocks.
2. long and silky
3. atmospheric pressure.
(B) The density of the air will decrease.

- 2 (A) (✓)
(B) 1. pesticides – chemical fertilizers
2. slowly – slowly.

- 3 (A) Water vapor. (All items are forms of precipitation process, while water vapor is a form of evaporation process).
(B) 1. condensation
2. water which is found in the pot.

Model Exam 10

- 1 (A) 1. d 2. c 3. a
(B) Because sand soil has large amount of pore spaces between its particles.

- 2 (A) (✓)
(B) 1. Oceans. 2. Seas.

- 3 (A) precipitation.
(B)

Organic ingredients	Inorganic ingredients
– Worms.	– Air.
– Insects.	– Water.
– Remains of dead plants.	– Rocks.
	– Minerals.

Model Exam 11

- 1 (A) 1. (✗) 2. (✓) 3. (✗)
(B) Due to deforestation, drought and overgrazing.

- 2 (A) b
(B) 1. Pore spaces.
2. Genes.

- 3 (A) Clay
(B) 1. hot – cold
2. quickly – quickly

Model Exam 12

- 1 (A) 1. gains 2. humidity.
3. Emperor
(B) It is used to measure the atmospheric pressure.

- 2 (A) (✗)
(B) 1. To get the deep groundwater.
2. Because sandstorms harm the human eyes and respiratory system.

- 3 (A) c
(B) 1. Weathering process.
2. Clouds.

Model Exam 13

- 1 (A) 1. b 2. d 3. a
(B) Rotation of Earth.

- 2 (A) Less
(B) 1. water vapor – evaporation
2. leaves – water.

- 3 (A) (✓)
(B) 1. sand – yellow.
2. silt – (2).

Model Exam 14

- 1 (A) 1. Sphynx 2. wind.
3. African
(B) The too intense light may damage the plant's parts and cause their drying or burning.

- 2 (A) b
(B) 1. Falcons or Eagles.
2. The thick fur of some animals.

- 3 (A) (✗)
(B) 1. Flooding.
2. Condensation process.

Model Exam 15

- 1 (A) 1. (✗) 2. (✗) 3. (✓)
(B) Flooding.

- 2 (A) a
(B) 1. Ecosystem.
2. Soil.

- 3 (A) Availability of water (All items are inherit traits except availability of water).
(B) 1. Hot water moves up, and cold water falls down.
2. The temperature of the desert sand will decrease.

Model Exam 16

- 1 (A) 1. b 2. d 3. a
(B) Because the sun rays fall semi-inclined on Earth's surface of these areas, so the weather is warm.

- 2 (A) (✓)
(B) 1. It measures the wind speed.
2. It measures the amount of rain in a certain area.

- 3 (A) d
(B) 1. Sun.
2. Behavioral adaptation.

Model Exam 17

- 1 (A) 1. c 2. b 3. a
(B) The temperature of the desert sand will decrease.

- 2 (A) water.
(B) 1. the temperature – the atmospheric pressure.
2. liquids – gases.

- 3 (A) (✗)
(B) 1. Human – Animals – Plants
2. Sunlight – Air – Water.

Model Exam 18

- 1 (A) 1. (✗) 2. (✗) 3. (✓)
(B) Because it doesn't have the genetic factor for long hair.

- 2 (A) 1. c 2. a
(B) 1. Minerals.
2. Anemometer.

- 3 (A) genetic
(B) 1. c 2. b

Model Exam 19

- 1 (A) 1. natural activities
2. behavioral
3. desert
(B) The trait of hairless body appears on the offspring.

- 2 (A) (✗)
(B)

	Animals	Plants
Inherited traits	- Hair length. - Fur color. - Eye color. - Ears shape.	- Leaves shape. - Place of the flower. - Leaves color. - Flower color. - Plant length.

PART 3

- 3** (A) d
(B) 1. Because sand soil has large amount of pore spaces between its particles.
2. Because the sun rays fall semi-inclined on Earth's surface of these areas, so the weather is warm.

Model Exam 20

- 1** (A) 1. b 2. c 3. d

(B) Due to the increase in the evaporation of the lake water.

- 2** (A) convection
(B) 1. sand – clay
2. condensation – precipitation.

- 3** (A) 1. d 2. b 3. b
(B) 1. Atmospheric pressure.
2. Adaptation.

NOW

AT ALL BOOKSTORES



EL-MOASSER

IN: Mathematics
& Connect Plus

الجزء الخاص بالإجابات
يُصرف مجاناً مع الكتاب



SCIENCE



AL TALABA BOOKSTORE

For printing, publication & distribution

El Faggala - Cairo - Egypt

Tel.: 02/ 259 340 12 - 259 377 91

E-mail: info@elmoasserbooks.com

www.elmoasserbooks.com

15014



/ElMoasser.eg



6 223007 311861