EL-MOASSER
SERIES

SCIENCE

Guide Answers

By A Group of Supervisors



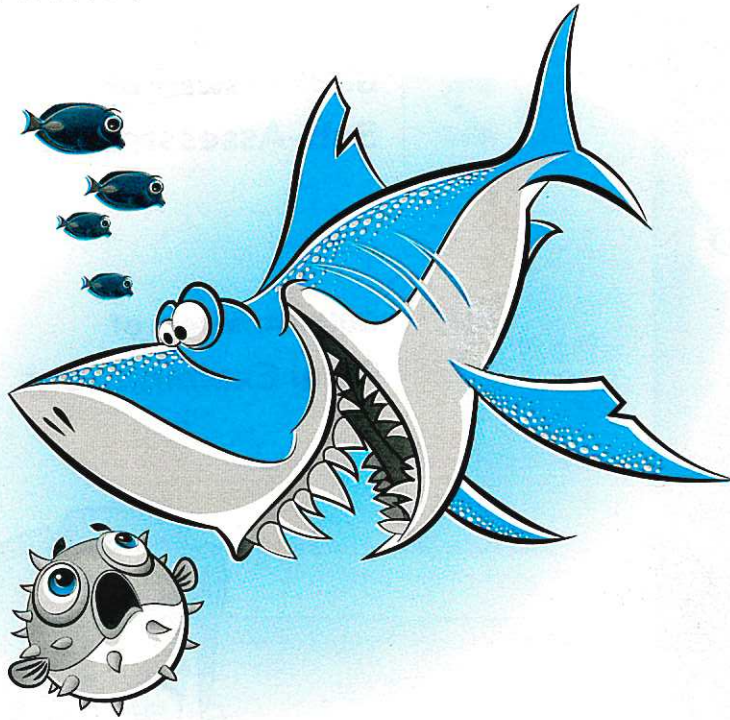
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2025
FIRST TERM

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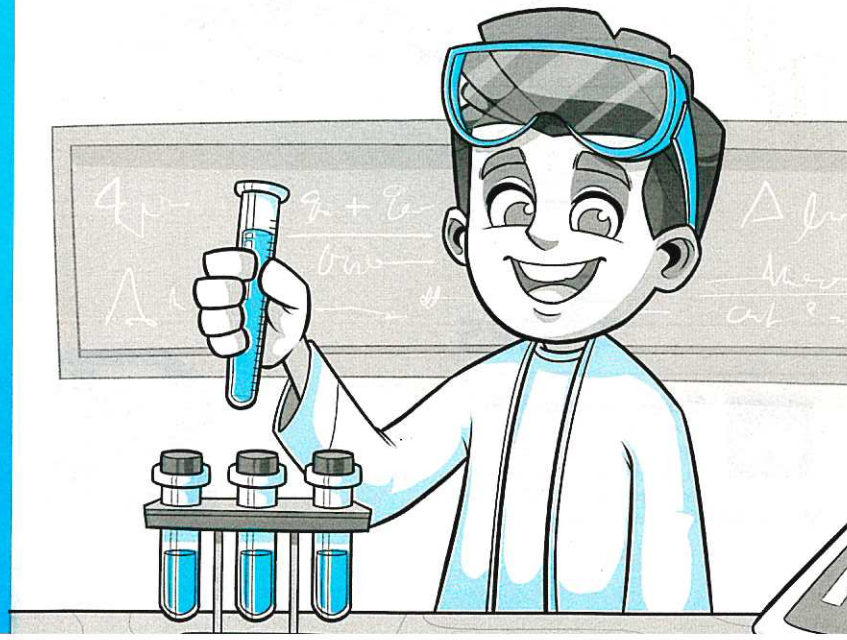
FIRST TERM

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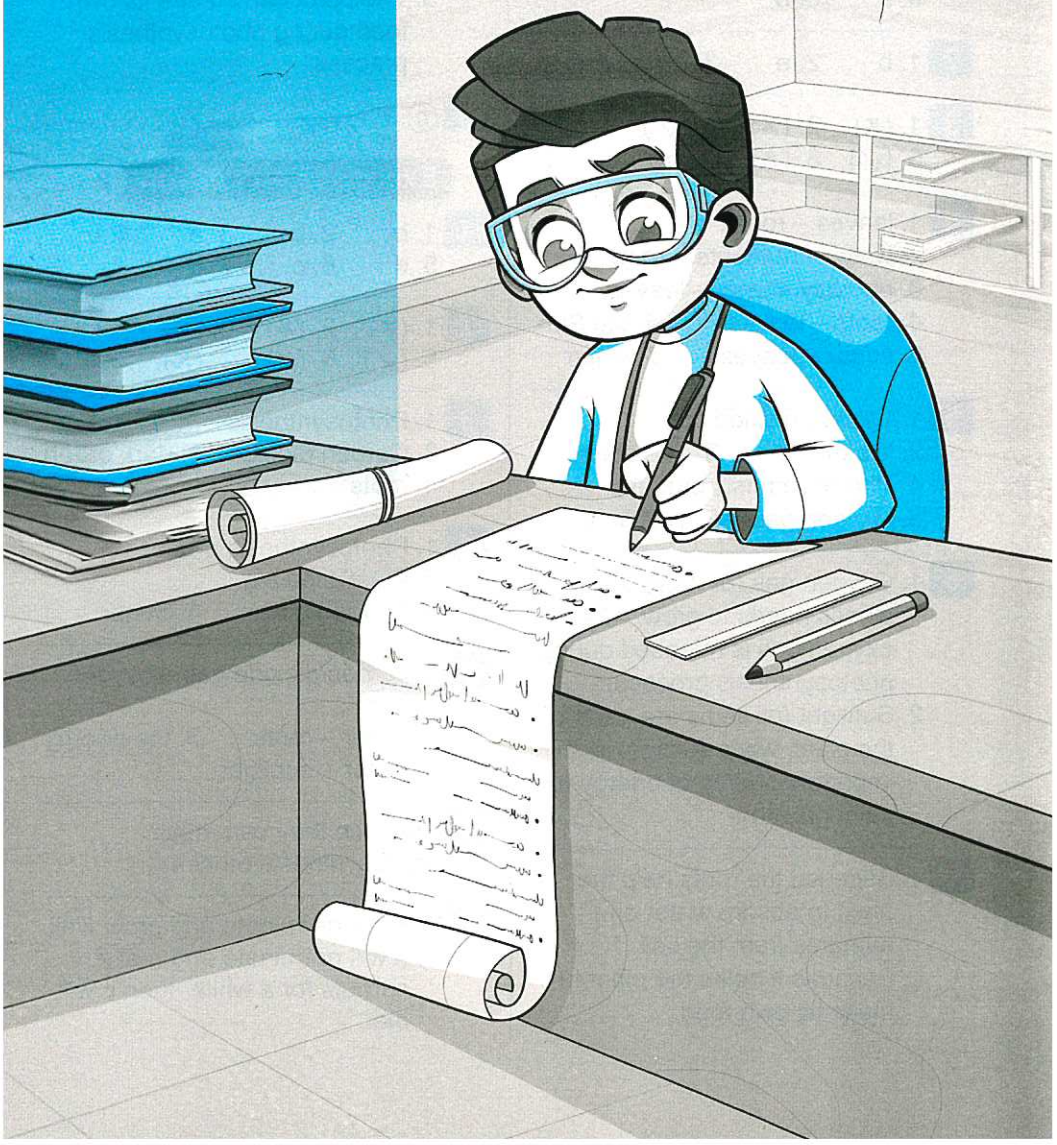
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PART 1

Guide Answers of
Exercises on Lessons



Concept (1.1)

Exercises on Lesson 1

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

2 1. b 2. e 3. a 4. d

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

4 1. leaves – roots.
2. water – nutrients – roots.
3. photosynthesis – leaves.
4. roots – leaves 5. the Sun
6. sugar – leaves 7. water

5 1. Carbon dioxide gas.
2. Water. 3. The stem.
4. Photosynthesis process.
5. Oxygen gas. 6. The Sun.

6 1. Oxygen gas (all items are plant's needs to grow, while oxygen gas is released during photosynthesis process).
2. Sunlight (all items are parts of the plant, while sunlight is an important source of energy for plant growth).

7 1. Because the roots help the plant to absorb water and nutrients from the soil.
2. Because it helps the plant to make its own food.

8 1. Water and nutrients will not be carried from the roots to the leaves.
2. Plants can't make their own food during photosynthesis process.
3. The plant can't make its own food during photosynthesis process.

9 ⓑ.

Exercises on Lesson 2

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

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

3 1. Photosynthesis
2. Carbon dioxide 3. dark green
4. roots

4 1. Photosynthesis process.
2. Plant's leaves.
3. Oxygen gas. 4. Sugar.

5 1. carbon dioxide gas – oxygen gas
2. water – roots. 3. the energy
4. water – sunlight

6 Because they can make photosynthesis process.

7 1. It will germinate and grow well.
2. It will germinate and make sprouts for a while, then it will die.

3. The plant can't make photosynthesis process and it will die.

8
1. figure Ⓐ – figure Ⓑ.
2. soil

Exercises on Lesson 3

1

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

2

① 1. e	2. c	3. a	4. d	
② 1. d	2. e	3. b	4. c	5. a

3

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

4

1. root hairs	2. the stem
3. tuber	4. runner
5. upright	6. gases
7. leaves	8. oxygen
9. Phloem	

5

1. Plant's root.	2. Root hairs.
3. Plant's stem.	4. Xylem.
5. Climb stem.	
6. Runner stem.	7. Potato plant.
8. Stomata.	9. Chlorophyll.
10. Phloem.	
11. Carbon dioxide gas.	

6
1. fix – nutrients
2. root hairs – water
3. xylem
4. climb – tuber
5. wood – upright
6. runner stems. 7. stomata
8. narrow.
9. sugars – proteins
10. photosynthesis – phloem.
11. chlorophyll – the sunlight.

7
1. To increase the amount of absorbed water and nutrients that the plant needs from the soil.
2. Because they transport water and nutrients from roots to the plant's leaves.
3. To allow gases to move into and out of the plant.
4. Because chlorophyll absorbs the energy from sunlight that helps the plant to make photosynthesis process.
5. Because plants produce oxygen gas during photosynthesis process which is important for all living organisms to breathe.

8
1. The plant can't absorb water and nutrients from the soil and also can't be fixed in the soil.
2. Gases can't move into or out of the plant's leaves and the plant will die.
3. The plant can't absorb the energy from sunlight and can't make photosynthesis process.
4. It can't make its own food and it will die.

9 (1) soil. (2) water
(3) nutrients (4) xylem.
(5) leaves (6) flowers
(7) food
(8) photosynthesis

10 1. red. 2. xylem

Exercises on Lesson 4

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

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

3 1. heart 2. Heart
3. one-way 4. Arteries
5. chemical
6. photosynthesis
7. seeds

4 1. Xylem.
2. Circulatory system.
3. Heart.
4. Blood capillaries.
5. Plant transport system.
6. Arteries. 7. Veins.
8. Glucose sugar.
9. Phloem. 10. Flowers.
11. Plant reproduction.

5 1. glucose
2. leaves – the nose – the mouth.
3. the heart – blood vessels – blood.
4. glucose – oxygen
5. circulatory
6. two atria – two ventricles.
7. leaves
8. xylem – phloem.
9. heart – xylem – roots
10. light – chemical
11. seeds – reproduce.
12. arteries – veins – blood capillaries.

6 1. Because xylem carries water and nutrients from the roots to the leaves.
2. Because flowers produce seeds for the plant that help it to reproduce.

7 1. Plants can't get their needed energy to survive and grow.
2. The plant can't produce seeds that help it to reproduce.

8 (1) plant parts. (2) blood.
(3) xylem. (4) arteries.
(5) phloem. (6) veins.

9 (3) Vessels move glucose .....
(1) Light from the Sun .....
(4) Plant parts use the glucose ....
(2) The leaves transform light energy .....

10 1. a vein. 2. an artery.
3. ① – ② 4. circulatory

Exercises on Lesson 5

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

2 1. b 2. d 3. a 4. c

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

4 1. water. 2. spiny
3. apple

5 1. coconut – maple (dandelion)
2. spines. 3. light seeds.

6 1. Because seeds can stick on animals fur or being eaten by animals and come out with their stool.
2. Because they are light seeds.
3. Because their seeds are spiny seeds.

Model Exam (1) on Concept (1.1)

1 (A) 1. b 2. c 3. b 4. d
(B) It will germinate and grow well.

2 (A) 1. (✗) 2. (✓) 3. (✗) 4. (✓)
(B) Because they are spiny seeds.

3 (A) 1. Water. 2. Flowers.
3. The Sun. 4. Potato plant.
(B) 1. figure Ⓐ – figure Ⓑ.
2. soil

Model Exam (2) on Concept (1.1)

1 (A) 1. water 2. chemical
3. heart 4. wood
(B) Because plants produce oxygen gas during photosynthesis process which is important for all living organisms to breathe.

2 (A) 1. c 2. d 3. b 4. a
(B) 1. leaves 2. Xylem

3 (A) 1. b 2. d 3. b 4. b
(B) 1. circulatory
2. ① Heart.
② Vein.
③ Artery.
④ Blood capillaries.

Concept (1.2)

Exercises on Lesson 1

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

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

3 1. Ecosystem. 2. Ecosystem.

4 1. plants (grasses) 2. soil.
3. ecosystem.
4. an ocean – a desert.

5 To get energy as they cannot produce their own food.

6 The hawk moves away to search for food in another ecosystem.

7 1. (A) and (B) – (C)
2. (B) 3. (B) and (C)

Exercises on Lesson 2

1 1. b 2. d 3. b 4. c
5. a 6. b 7. b 8. d
9. b 10. c 11. d 12. b
13. c 14. c 15. c 16. b
17. d 18. b 19. c 20. b
21. d

2 1. c 2. d 3. a

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

4 1. Photosynthesis process.
2. The Sun.
3. Plants (Producers).
4. Glucose.
5. Carbon dioxide gas.
6. Oxygen gas.
7. Plants (Producers).
8. Decomposers.
9. Decomposition process.
10. Food chain.
11. Prey. 12. Predator.

5 1. energy
2. water – carbon dioxide gas
3. food.
4. glucose sugar – oxygen gas
5. producers
6. consumers 7. plants.
8. decomposers. 9. primary
10. nutrients

6 1. To get his needed energy to do his activities.
2. Because it is absorbed by the plants leaves to make their own food and grow, then humans and animals eat these plants.
3. Because consumers cannot make their own food.
4. Because decomposers return nutrients of dead organisms back to the soil.

7 1. The plants cannot make their own food by photosynthesis process, so there will be no life on Earth.
2. The secondary consumers will move away to another place to search for food or they will die.
3. Dead organisms will not be decomposed and their nutrients will not return back to the soil.

8 (1) Grasses (2) Duck
(3) Fox
a. tertiary
b. decomposers
c. light – photosynthesis
d. herbivores.

9 1. a plant 2. bacteria
3. primary 4. eagle
5. soil

Exercises on Lesson 3

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

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

3 1. food web. 2. producers.
3. secondary consumer.
4. primary consumers.

4 1. d 2. c

5 1. a 2. d 3. b 4. d

Exercises on Lesson 4

1 1. b 2. d 3. d 4. a

2 1. (✓) 2. (✓) 3. (✗) 4. (✗)

3 1. To disperse their seeds to other places.
2. Because restoration ecology is important to rebuild habitats that are damaged.

Model Exam (1) on Concept (1.2)

1 (A) 1. b 2. a 3. d 4. c
(B) Dead organisms will not be decomposed and their nutrients will not return back to the soil.

2 (A) 1. (✗) 2. (✗) 3. (✗) 4. (✓)
(B) Because they cannot make their own food as they cannot get energy directly from the Sun.

3 (A) 1. energy
2. glucose sugar – oxygen gas
3. primary 4. ecosystem.
(B) d

Model Exam (2) on Concept (1.2)

1 (A) 1. b 2. b 3. a 4. d
(B) Because consumers cannot make their own food.

2 (A) 1. The Sun
2. Producers (plants).
3. Prey. 4. Food chain.
(B) 1. producers. 2. secondary

3 (A) 1. e 2. c 3. d 4. a
(B) The plants cannot make their own food by photosynthesis process, so there will be no life on Earth

Concept (1.3)

Exercises on Lesson 1

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

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

3 1. Water pollution. 2. Overfishing.
3. Top predators.

4 1. pollution. 2. increase.
3. overfishing 4. flooding
5. top predators.

5 1. Because they will not find enough food to eat.
2. Because sharks feed on different fish that depend on algae to get their food.

6 1. They will pollute water and marine organisms will be negatively affected.
2. The water in the lake decreases due to evaporation and may completely disappear.
3. The number of primary consumers increases, while the amount of producers and the number of tertiary consumers decrease.

7 1. grasses – foxes 2. decreases.
3. rabbits 4. grasses

8 1. algae. 2. butterflyfish.
3. hawk

9 1. producer
2. zooplankton – triggerfish – parrotfish
3. primary 4. sea star

Exercises on Lesson 2

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

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

3 1. Tertiary consumers.
2. Decomposers.
3. Energy. 4. Population
5. Population change.
6. Seabirds.
7. Microorganisms.

4 1. decrease – increase
2. photosynthesis – producers
3. population 4. decomposers

5 1. preys 2. primary
3. decomposers 4. energy
5. increase.
6. microorganisms

6 Because in the ecosystem, all species depend on other species to survive, so an increase or decrease in one species affects the population of other species.

7 1. The population of this species will decrease.
2. The microorganisms will move away to a cooler water and also fish that feed on microorganisms.

8 1. (✗) 2. (✗) 3. (✓) 4. (✓)
5. (✓)

9 1. (✗) 2. (✓) 3. (✓) 4. (✗)
5. (✗)

Exercises on Lesson 3

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

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

3 1. Coral bleaching.
2. Microplastics.
3. Coral reefs.

4 1. shelter. 2. overfishing.
3. extinction. 4. predator
5. toxic

5 1. Because when the water temperature rises, the coral reefs get rid of algae from their tissues and turn completely into white causing coral bleaching.
2. Because plastics are toxic and sharp.

6 Plastic products get broken down into smaller pieces called microplastics.

7 1. (✗) 2. (✗) 3. (✓)

Exercises on Lesson 4

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

2 1. (✓) 2. (✗) 3. (✓) 4. (✓)
5. (✓)

3 1. Nursery.
2. Habitat restoration.

4 bleaching – nursery – grow up – dying.

5 Due to eroding of riverbanks.

6 b

7 c

Model Exam (1) on Concept (1.3)

1 (A) 1. b 2. d 3. c 4. d
(B) The number of primary consumers increases, while the amount of producers and the number of tertiary consumers decrease.

2 (A) 1. (✓) 2. (✗) 3. (✓) 4. (✗)
(B) Because when the water temperature rises, the coral reefs get rid of algae from their tissues and turn completely into white causing coral bleaching.

3 (A) 1. Nursery.
2. Microplastics.
3. Population.
4. Water pollution.

(B) 1. white.
2. primary

Model Exam (2) on Concept (1.3)

1 (A) 1. (✗) 2. (✗) 3. (✓) 4. (✓)
(B) Because in the ecosystem, all species depend on other species to survive, so an increase or decrease in one species affects the population of other species.

2 (A) 1. d 2. b 3. c 4. b
(B) They will get rid of algae that live in their tissues, then turn completely into white causing coral bleaching.

3 (A) 1. microorganisms.
2. primary consumers
3. small fish
4. preys

(B) 1. Rabbit (all items are top predators, while rabbit is a primary consumer).
2. Insects (all items are producers, while insects are consumers).

Concept (2.1)

Exercises on Lesson 1

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

2 1. c 2. d 3. b

3 1. (✓) 2. (✗) 3. (✓)
4. (✓) 5. (✓)

4 1. Matter. 2. Gas state.

5 1. solid – gas 2. solid
3. solid – gas 4. volume.

6 1. Wood (all items are liquids, while wood is solid).
2. Vinegar (all items are solids, while vinegar is liquid).
3. Coal (all items are gases, while coal is solid).

7 Because it has mass and volume.

8 It changes from liquid state into gas state.

9 1. (✓) 2. (✗)

Exercises on Lesson 2

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

2 1. b 2. c 3. a

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

4 1. Solid state. 2. Liquid state.
3. Gases. 4. Gas state.
5. Measuring tape.
6. Thermometer.

5 1. solid – liquid 2. solid
3. liquid – gas 4. liquid.
5. length 6. solid
7. particles 8. solid
9. gas

6 1. Because it has definite shape and volume.
2. Because it is a solid matter.
3. Because it is a gas matter.
4. Because it is a solid matter.
5. Because it has no definite shape and takes the shape of its container.

7 1. It will take the shape of each container.
2. It will not change.
3. It will have a definite shape.

8 1. (✓) 2. (✓) 3. (✗) 4. (✗)

Exercises on Lesson 3

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

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

3 1. high 2. normal
3. particles. 4. quickly.

4 1. Gas state.
2. Electron microscope.
3. Normal microscope

5 1. increase. 2. particles
3. solid 4. solid – gas
5. liquid – shape

6 1. To study them in an easier way.
2. To see each tiny particle as it is more powerful than normal microscope.
3. Because they are not held together.
4. Because particles of liquids can slide over each other.

7 1. It will increase.
2. It will increase.
3. It will increase.

8 1. solid 2. increase

9 1. (B) 2. (C) – (A) – (B)
3. (C).

Exercises on Lesson 4

1 1. b 2. a 3. c 4. a
5. b

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

3 1. Globe. 2. Model.

4 1. shape – volume.
2. solar 3. globe
4. microscope
5. volume – shape.

5 To see the shape and parts of germs without microscope.

6 It will be organized.

7 1. (1) 2. (2) 3. (3) 4. (3)

Exercises on Lesson 5

1 1. b 2. d 3. a 4. a

2 1. (✓) 2. (✓) 3. (✗)

3 1. liquid. 2. space
3. solid – gas. 4. particles.
5. containers.

4 Because it has no definite shape and definite volume.

5 It charges from liquid state to solid state.

6 1. (✗) 2. (✓) 3. (✗) 4. (✗)

7

Solids	Liquids	Gases
- Iron.	- Juice.	- Oxygen.
- Their particles keep their shape and volume.	- Their particles slide over each other.	- Their particles move very free.

Model Exam (1) on Concept (2.1)

1 (A) 1. solid 2. liquid.
3. particles 4. normal

(B) Because it has no definite shape and takes the shape of its containers.

2 (A) 1. (✓) 2. (✓) 3. (✗) 4. (✗)

(B) 1. Wood (all items are liquids, while wood is solid).
2. Vinegar (all items are solids, while vinegar is liquid).

3 (A) 1. Measuring tape.
2. Particle.
3. Microscope. 4. Gas.

(B) 1. c 2. a

Model Exam (2) on Concept (2.1)

1 (A) 1. a 2. a
3. b 4. a

(B) it will increase.

2 (A) 1. solid
2. liquid – shape
3. microscope
4. solid

(B) Because it is a gas matter.

3 (A) 1. Electron microscope.
2. Model.
3. Solid.
4. Gas.

(B) 1. b 2. c

Concept (2.2)

Exercises on Lesson 1

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

2 1. temperature 2. Ruler
3. volume 4. Balance

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

4 1. Ceramic tiles.
2. Strong stones. 3. Volume.
4. Mass. 5. Length.

5 1. climate 2. solid – liquid
3. mass
4. balance – thermometer
5. length – mass.
6. ceramic tiles – rains.

6 1. To protect the desert home from dust and dirt.
2. To protect the tropical rainforest home from animals getting inside.

7 The rain will be collected on the top of cold weather homes.

8 1. A 2. C 3. B 4. A

9 d

Exercises on Lesson 2

1 1. d 2. d 3. c 4. d
5. a 6. a

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

3 1. physical 2. color
3. odor 4. smaller

4 Because both of salt and pepper have different colors.

5 1. Sugar and Pepper.
2. Sugar and salt.
3. Salt and Pepper.

Exercises on Lesson 3

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

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

3 1. Physical properties.
2. Chemical properties.
3. Volume. 4. Mass.
5. Temperature.

4 1. Physical 2. chemical
3. temperature 4. rough
5. doesn't attract – floats
6. sinks – attracted
7. volume
8. one thousand 9. mass
10. iron – cotton.

5 1. Because rusting of iron is a change that happens to iron when it interacts with air and water.
2. Because quickly moving particles produce more thermal energy which cause increasing in temperature.

6 1. The paper becomes ash.
2. The temperature of the matter will decrease.
3. The iron nail will attract to the magnet, while the plastic spoon will not attract to the magnet.
4. The piece of cork will float on the surface of water.

7 1. P 2. C 3. P 4. P
5. C 6. P 7. P

8 1. B 2. A 3. A 4. B

9 1. larger 2. smaller 3. mass.

Exercises on Lesson 4

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

2 1. e → B 2. d → D
3. b → E 4. a → C
5. c → A

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

4 1. Conduction. 2. Helium gas.
3. Rubber.

5 1. chemical 2. helium – air.
3. flammable – poisonous
4. physical

5. heat – electricity.
6. steel – hard – strong.
7. rubber
8. smooth – transparent.
9. copper – wood

6 1. Because helium is lighter than air.
2. Because helium is not flammable or poisonous.
3. Because wood and plastic are bad conductors of heat.

7 1. The blimp will rise up in the air.
2. It will not conduct electricity.

8 1. Copper. 2. Helium
3. Rubber 4. Steel.
5. Glass.

Model Exam (1) on Concept (2.2)

1 (A) 1. b 2. a 3. c 4. a
(B) Because helium is not flammable or poisonous.

2 (A) 1. (✗) 2. (✓) 3. (✗) 4. (✓)
(B) The iron nail will attract to the magnet, while the plastic spoon will not attract to the magnet.

3 (A) 1. c 2. a 3. d 4. b
(B) 1. Rubber. 2. Steel.

Model Exam (2) on Concept (2.2)

1 (A) 1. (✗) 2. (✗) 3. (✓) 4. (✓)
(B) To protect the tropical rainforest home from animals getting inside.

2 (A) 1. chemical
2. temperature
3. climate 4. mass
(B) The temperature of the matter will decrease.

3 (A) 1. Physical properties.
2. Mass. 3. Helium.
4. Conduction.
(B) 2

Concept (2.3)

Exercises on Lesson 1

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

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

3 1. increasing 2. solid – liquid
3. thermal energy.
4. close together. 5. increase.
6. melting 7. melts
8. melt. 9. increase
10. thermal

4 1. Because the temperature of ice increases, so it will melt and becomes liquid water.
2. Because the particles of water move faster, vibrate and spin around faster.

5 1. Ice cubes will melt and become liquid water.
2. The particles of water will move faster.

6 1. 1 2. 3
3. 2 4. 1 – 3

7 1. (✓) 2. (✗) 3. (✗) 4. (✓)

Exercises on Lesson 2

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

2 1. c 2. a 3. e 4. d

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

4 1. thermal energy 2. reverse
3. physical 4. water.

5 1. Physical changes.
2. Melting process.
3. Freezing process.
4. Liquid state.

6 1. temperature. 2. melting
3. freezing 4. temperature
5. thermal 6. increase
7. decrease 8. gas
9. melting – evaporation
10. solid.

7 1. Because ice cubes will gain thermal energy, so it changes to liquid water.
2. Because in these processes the matter changes without any change in its structure.
3. Because water vapor loses thermal energy to the cold surface, so the particles of water vapor move slower and get close together forming water drops.

8 1. The particles of water release thermal energy and they move slower and get close together forming solid ice.
2. The particles of water gain more thermal energy and they move faster and spread more forming water vapor.

9 1. B – A – C 2. A – B – D

Exercises on Lesson 3

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

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

3 1. filtration. 2. dissolves.
3. gas. 4. the same.

4 1. Compound. 2. Mixture.

5 1. compound 2. compound
3. color
4. mass – properties
5. changed. 6. solid – liquid
7. filtration 8. evaporation

6 1. Because they are formed of two or more materials that don't combine chemically with each other.
2. Because the soil does not dissolve in water.
3. Because mixing baking soda with vinegar produces gas causing bubbles which means that the properties of the substances are changed.

7 1. The water will evaporate leaving the salt in the container.
2. The mass and properties sugar will not change.

8 1. (✗) 2. (✓) 3. (✗)

9 1. Solid 2. Gas
3. Liquid 4. Solid and liquid

10 1. 5 gm 2. 10 gm
3. changed into new color.
4. C

Exercises on Lesson 4

1

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

2 1. b 2. d 3. a 4. c

3

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

4 1. physical – chemical.
2. oxygen – chemical
3. chemical
4. physical – chemical
5. physical
6. substance – properties
7. chemical – physical
8. chemical – physical
9. chemical

5 1. Because the taste of the bread is not like its ingredients which means that a new substance is formed.
2. Because when iron reacts with oxygen and water, it rusts (form a chemical substance called iron oxide).
3. Due to the chemical change that happens to the milk.
4. Because maxing fruit salad don't form new substance.

6 1. A new substance is formed and its color is dark blue.
2. They release heat that can start a fire.
3. The piece of metal will lose it's shining.

7 Because mixing vinegar with baking soda produces gas bubbles which cause inflating of the balloon.

8 1. Chemical change.
2. oxygen – water – rusting.

9 1. The ice cube will melt and changing into water.

2. Physical change, because it is the change of the state of water without any change in its structure.

10
1. Chemical change.
2. In figure (2), Because folded paper is a change in the shape of paper without any change in its structure. So, we can reverse it easly.

Exercises on Lesson 5

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

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

3
1. Desalination process.
2. Filtration process.
3. Evaporation process.

4
1. energy – expensive
2. salt – marine
3. fresh – oceans – seas.
4. filtration

5 Because it is a mixture of water, salt, other minerals, gases, living organisms and dead organisms.

6 Water vapor rises up leaving salts and other minerals.

7 1. 1 2. 4 3. 2 4. 3

Model Exam (1) on Concept (2.3)

1 (A) 1. temperature.
2. compounds 3. new
4. chemical

(B) Because in these processes the matter changes without any change in its structure.

2 (A) 1. a 2. d 3. b 4. a

(B) The mass and properties of sugar don't change.

3 (A) 1. (✓) 2. (✗) 3. (✗) 4. (✓)

(B) 1. Compound.
2. Desalination process.

Model Exam (2) on Concept (2.3)

1 (A) 1. b 2. d 3. a 4. c

(B) Because when iron reacts with oxygen and water it rusts (form a chemical reddish color substance called iron oxide).

2 (A) 1. (✗) 2. (✓) 3. (✓) 4. (✗)

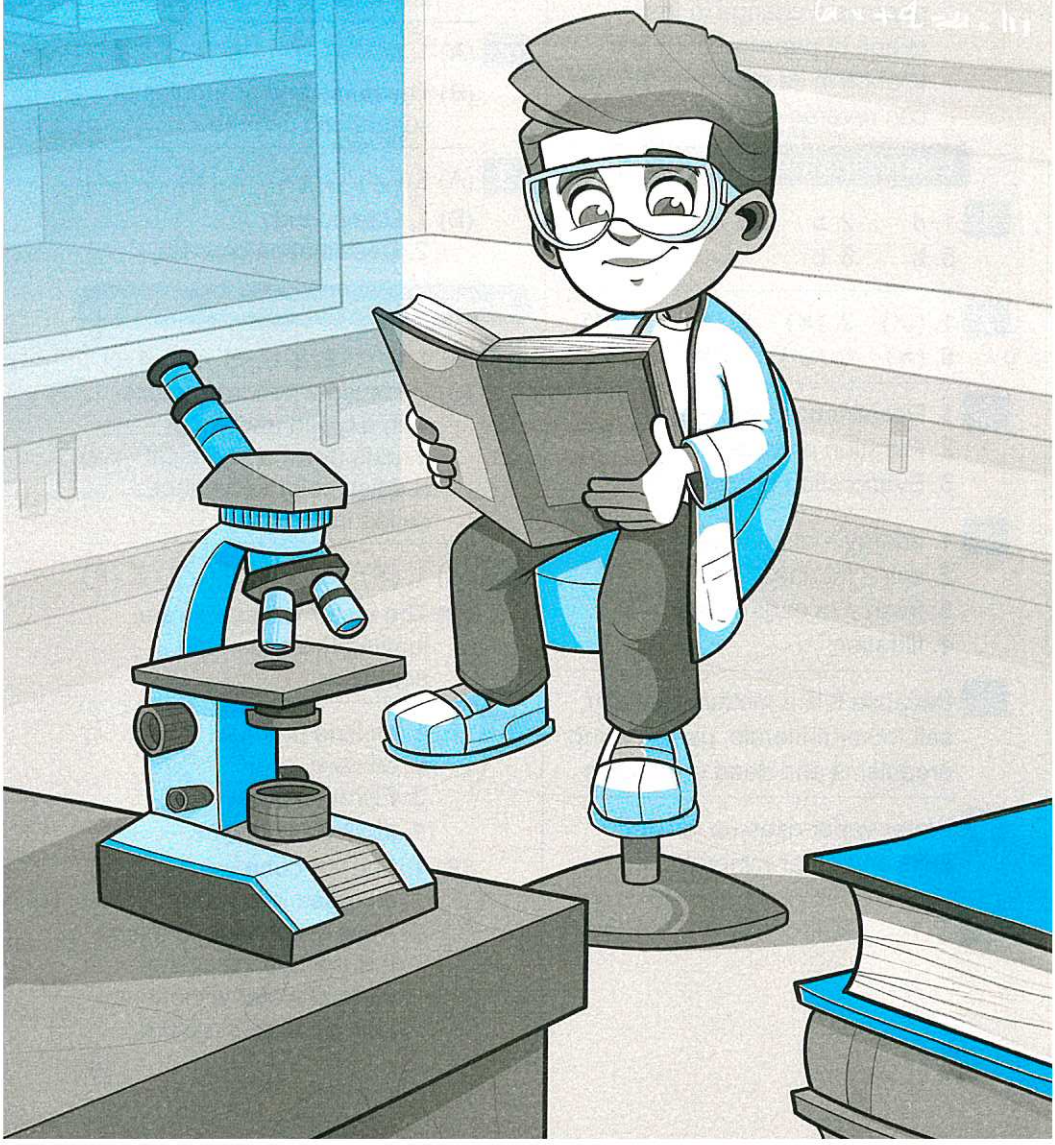
(B) The water will evaporate leaving the salt in the container.

3 (A) 1. Melting process.
2. Mixture.
3. Filtration process.
4. physical changes.

(B) 1. The ice cube will melt and changes into water.
2. Physical change, because it is the change of the state of water without any change in its structure.

PART 2

Guide Answers of **Self-Assessments**



Concept (1.1)

Self-Assessment 1

1 (A) 1. a 2. c 3. d
(B) Because plants make their own food in their leaves during photosynthesis process.

2 (A) 1. (✓) 2. (✗) 3. (✓)
(B) The plant can't make photosynthesis process, so it will die.

3 1. leaves. 2. stem – roots
3. carbon dioxide

Self-Assessment 2

1 (A) 1. (✗) 2. (✗) 3. (✓)
(B) Because it carries water and nutrients from the roots to the leaves.

2 (A) 1. Roots.
2. Carbon dioxide gas.
3. Germination.
(B) The seeds will germinate and make sprouts and begin to grow.

3 1. b 2. d 3. a

Self-Assessment 3

1 (A) 1. Chlorophyll 2. root hairs
3. photosynthesis
(B) The color of leaves will be turned into the same color of water in the cup.

2 (A) 1. roots 2. soil.
3. stem
(B) To transport the food materials from the leaves to the other parts of the plant.

3 1. stomata. 2. oxygen gas
3. xylem.

Self-Assessment 4

1 (A) 1. a 2. b 3. c
(B) Because during photosynthesis process, plants produce oxygen gas which is important for all living organisms to breathe.

2 (A) 1. (✓) 2. (✓) 3. (✗)
(B) The plants can't absorb more water and nutrients from the soil.

3 1. veins – nutrients
2. sugar – phloem.
3. xylem.
4. arteries – oxygen

Self-Assessment 5

1 (A) 1. (✗) 2. (✓) 3. (✓)
(B) Because they increase the amount of absorbed water and nutrients from the soil.

2 (A) 1. Human circulatory system.
2. Seed dispersal.
3. Plant reproduction.
(B) Plant's leaves will be pale green or yellow.

3 1. wind – light seeds.
2. water.

Model Exam on Concept (1.1)

1 (A) 1. water – nutrients – roots.
2. veins – blood capillaries.
3. wood
4. xylem – phloem.
(B) Because it transports water and nutrients from the roots to the leaves.

2 (A) 1. b 2. d 3. a 4. c
(B) The plant can't produce seeds that help it to reproduce.

3 (A) 1. (✓) 2. (✗) 3. (✗) 4. (✓)
(B) 1. Chlorophyll.
2. Glucose sugar.

Concept (1.2)

Self-Assessment 6

1 (A) 1. (✗) 2. (✓) 3. (✗)
(B) Because different animals eat plants or other animals or both of them to get energy.

2 (A) 1. the Sun.
2. ecosystem.
3. energy.
(B) It will decompose and its nutrients are returned to the soil.

3 1. b 2. d 3. a

Self-Assessment 7

1 (A) 1. b 2. d 3. c
(B) Because producers use the light energy of the Sun to make their own food through photosynthesis process.

2 (A) 1. Nonliving things. (All items are living organisms, except nonliving things).
2. Consumers. (All items are related to photosynthesis except consumers).
3. Snakes. (All items are decomposers, while snakes are consumers).
(B) 1. plant – it makes its own food.
2. bird – it eats grasshopper which is a primary consumer.

3 **Producers :** photosynthesis.
Consumers : living organisms.
Decomposers : decomposition.

Self-Assessment 8

1 (A) 1. b 2. d 3. c
(B) Because the living organism that eats plants is considered as a primary consumer.

2 (A) 1. Rabbits (all items are predators, while rabbits are primary consumers).
2. Plants (all items are decomposers, while plants are producers).
3. Bacteria (all items are primary consumers, while bacteria are decomposers).

(B) - Grasses ⟶ Deer ⟶ Lion.
- Grasses ⟶ Deer ⟶ Alligator.

3 1. d 2. c 3. b 4. d

Self-Assessment 9

1 (A) 1. (✓) 2. (✓) 3. (✗)
(B) Because they can be carried away by air to other places.

2 (A) 1. a 2. b 3. c
(B) All living organisms in this ecosystem will move away to another healthy ecosystem or they will die.

3 Figure (B).

Model Exam on Concept (1.1) & (1.2)

1 (A) 1. d 2. c 3. c 4. b
(B) The secondary consumers will move away to another place to search for food, or they will die.

2 (A) 1. (✗) 2. (✓) 3. (✗) 4. (✓)
(B) c

3 (A) 1. Carbon dioxide gas.
2. Root hairs.
3. Decomposers.
4. Flowers.

(B) 1. d 2. c

Concept (1.3)

Self-Assessment 10

1 (A) 1. Sea stars (all items are producers, while sea stars are primary consumers).
2. Algae (all items are primary consumers, while algae are producers).
3. Snakes (all items are top predators, while snakes are secondary consumers).

(B) Because all food chains begin with producers that depend on sunlight to make their own food.

2 (A) 1. c 2. d 3. d
(B) 1. Producers. 2. Clam.
3. Secondary consumer.
4. Tertiary

3 Grasses ⟶ Deer ⟶ Lion

Self-Assessment 11

1 (A) 1. Decomposers (all items are types of consumers except decomposers).
2. Clam (all items live on land, while clam lives in water).

3. Tiger (all items can form a marine food chain, while tiger doesn't share in this food chain).

(B) Because predators feed on other consumers, which previously fed on plants or animals.

2 (A) 1. primary consumer
2. producers 3. sunlight

(B) The number of microorganisms on which small fish feed on will increase.

3 1. (✗) 2. (✓) 3. (✗) 4. (✓)

Self-Assessment 12

1 (A) 1. coral bleaching
2. plastic 3. producers.

(B) They will get rid of algae that live in their tissues, then turn completely into white causing coral bleaching.

2 (A) 1. toxic and sharp 2. white.
3. real food

(B) Because plastic products are toxic and sharp that harm marine organisms.

3 Algae ⟶ Zooplankton ⟶ Corals ⟶ Parrotfish ⟶ Shark.

Self-Assessment 13

1 (A) 1. (✓) 2. (✓) 3. (✗)

(B) The number of this animal species decreases gradually and may extinct.

2 (A) 1. d 2. c 3. a

(B) Because it decreases the amount of producers which consumers feed on, and also causes flooding due to riverbanks eroding.

3 1. Zero plastics
2. Habitat restoration
3. nursery.

Model Exam on Theme (1)

1 (A) 1. d 2. b 3. b 4. a

(B) Because green plants absorb sunlight during photosynthesis process to make their own food and produce oxygen gas that all other living organisms need for breathing.

2 (A) 1. Producers.
2. Chlorophyll.
3. Decomposers.
4. Population.

(B) Small fish don't find their food because microorganisms move to another place where the water is cooler.

3 (A) 1. consumers
2. wind. 3. preys
4. top predators.

(B) Microorganisms ⟶ Small fish ⟶ Seabirds.

Assess Your Learning on Theme (1)

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

2 1.

The plant in the light	The plant in the dark
- Its leaves are dark green color. - It can make its own food, because it can make photosynthesis process.	- Its leaves are yellow color or pale green color. - It can't make its own food, because it can't make photosynthesis process.

2. Look at the Assessment Book on page (58).

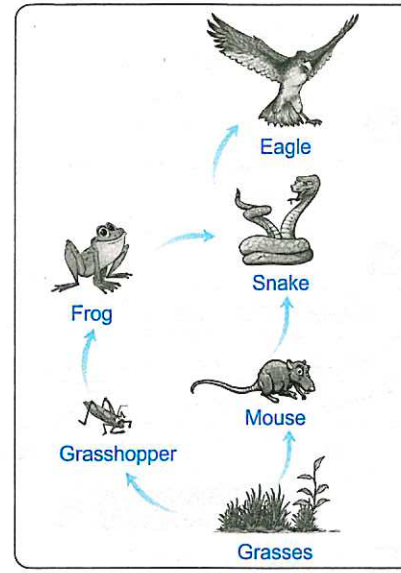
3.

The producer organisms	The consumer organisms
They are organisms that can make their own food and don't feed on other plants or animals.	They are organisms that eat other living organisms to get their energy, because they cannot make their own food.

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

4 1. Decomposer .....
2. ..... white.
3. ..... sunlight .....

5 1.



2. - Grasses : producers.
   - Mouse and grasshopper : primary consumers.
   - Snake and frog : secondary consumers.
   - Hawk : tertiary consumer.

Concept (2.1)

Self-Assessment 14

1 (A) 1. solid 2. solid
3. gas
(B) It becomes a gas.

2 (A) 1. (✗) 2. (✓) 3. (✗)
(B) Because it has mass and volume.

3

Solids	Liquids	Gases
Sugar	Milk	Carbon dioxide
Stone	Blood	Oxygen
Coal	Oil	Water vapor

Self-Assessment 15

1 (A) 1. Glass (all items are gases, while glass is solid).
2. Air (all items are solids, while air is gas).
3. Coin (all items are liquids, while coin is solid).
(B) Because it has no definite shape and it has definite volume.

2 (A) 1. gas 2. mass
3. scale.
(B) It will have no definite shape.

3 1. (A) → (B) → (C).
2. (C) → (B) → (A).

Self-Assessment 16

1 (A) 1. particles.
2. microscope. 3. solids.
(B) To see each tiny particle as it is more powerful than normal microscope.

2 (A) 1. liquid 2. gas
3. definite
(B) The particles of balloon come close together, so the balloon becomes smaller.

3 1 → d → B.
2 → c → C.
3 → a → D.

Self-Assessment 17

1 (A) 1. (✓) 2. (✗) 3. (✗)
(B) Because it has mass and volume.

2 (A) 1. solids 2. energy.
3. similar to
(B) It will take the shape of their containers.

3

Regular pattern	Random arrangement
Wood Plastic	Water Oxygen Oil Carbon dioxide

Self-Assessment 18

1 (A) 1. (✓) 2. (✗) 3. (✓)
(B) Because it is a gas.

2 (A) 1. volume. 2. solids
3. solids
(B) It will increase.

3 1. solid 2. liquid
3. gas

Model Exam on Concept (2.1)

1 (A) 1. particles. 2. solar
3. solid 4. liquid
(B) Because it has definite shape and volume.

2 (A) 1. c 2. b 3. c 4. a
(B) It will be organized.

3 (A) 1. (✓) 2. (✗) 3. (✗) 4. (✗)
(B) 1. Coal (all items are gases, while coal is solid).
2. Wood (all items are liquids, while wood is solid).

Concept (2.2)

Self-Assessment 19

1 (A) 1. slanted 2. climate.
3. thermometer.
(B) Because roofs of cold weather homes are made of ceramic tiles and they are slanted.

2 (A) 1. (✗) 2. (✓) 3. (✓)
(B) 1. Balance.
2. Measuring cup.

3 1. 2 – rains. 2. 1 – dust – dirt.
3. 3 – animals getting inside.

Self-Assessment 20

1 (A) 1. d 2. a 3. d
(B) Becuase each of salt and sugar have the same white color.

2 (A) 1. balance.
2. cold weather
3. shape
(B) Taste and smell.

3 1. B 2. A 3. C

Self-Assessment 21

1 (A) 1. c 2. a 3. d
(B) Because mass of matter is changed by changing its size.

2 (A) 1. (✗) 2. (✓) 3. (✗)
(B) It doesn't attract to the magnet.

3 1. material (A).
2. material (B). 3. balance.

Self-Assessment 22

1 (A) 1. d 2. b 3. a
(B) Because glass is transparent and smooth.

2 (A) 1. Rusting (all items are physical properties of matter, while rusting is a chemical property of matter).
2. Kilogram (all items are measuring units of volume, while kilogram is a measuring unit of mass).
3. Iron nail (all items are not attracted to the magnet, while iron nail is attracted to the magnet).

(B) The piece of cork will float on the surface of water.

3 1. B – hard – strong.
2. C – waterproof – flexible.
3. A – transparent – smooth.

Model Exam on Concepts (2.1) & (2.2)

1 (A) 1. increases. 2. mass
3. microscope 4. rubber

(B) Because rusting of iron is a change which happens in iron when it interacts with water and air.

2 (A) 1. (✓) 2. (✗) 3. (✗) 4. (✓)

(B) It will have definite shape.

3 (A) 1. c 2. b 3. b 4. c
(B) 1. B 2. A

Concept (2.3)

Self-Assessment 23

1 (A) 1. mass 2. melting
3. heated

(B) Because thermal energy is used in many things every day such as cooking food and warming homes.

2 (A) 1. water. 2. heating.
3. faster.

(B) They will melt and change into liquid water.

3 1. B 2. A 3. C
4. B

Self-Assessment 24

1 (A) 1. heating.
2. thermal
3. condensation

(B) Because when decreasing the temperature of water, its particles lose energy and move slower, so water changes into ice.

2 (A) 1. condensation
2. away from
3. water vapor.

(B) The distance between particles of water vapor will decrease and changes into liquid water.

3 1. Ice. 2. Water.
3. Water vapor. 4. Melting
5. Freezing 6. Evaporation
7. Condensation

Self-Assessment 25

1 (A) 1. temperature
2. filtration
3. mass – properties
(B) Because each material in a mixture keeps its properties without any change.

2 (A) 1. faster 2. solid
3. mixture
(B) The mass of apple pieces remains as it is without any change.

3 1. 20 2. 30 3. 30
4. remain as it is.

Self-Assessment 26

1 (A) 1. c 2. c 3. d
(B) Because coloring a paper is a change in matter without any change in its structure.

2 (A) 1. gas 2. compound
3. chemical
(B) Iron wire will rust.

3 1. Evaporation process.
2. Condensation process.
3. Physical change.
4. Salt only.

Self-Assessment 27

1 (A) 1. c 2. b 3. d
(B) Because it consists of water, salt, other minerals, gases, living organisms and dead organisms.

2 (A) 1. (✗) 2. (✓) 3. (✓)
(B) The particle of ice will move faster and changes into liquid water.

3 1. 1 – 4 2. 3 – 2
3. Physical change.

Model Exam on Theme (2)

1 (A) 1. d 2. b 3. c 4. a
(B) To examine one tiny particle such as a blood cell.

2 (A) 1. rough 2. physical
3. solid 4. ceramic tiles
(B) It will melt and changes into liquid water.

3 (A) 1. b 2. c 3. a
(B) 1. solid 2. increase

Assess Your Learning on Theme (2)

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

Monthly Tests

October Tests

Model 1

1 (A) 1. (✗) 2. (✓) 3. (✗) 4. (✗)
(B) Because it feeds on primary consumers that feed on plants.

2 (A) 1. c 2. c 3. b 4. a
(B) Grass ⟶ Grasshopper ⟶ Frog ⟶ Snake ⟶ Owl.

3 (A) 1. Decomposers.
2. Stomata.
3. Carbon dioxide gas.
4. (Stem) Xylem.
(B) Grasses. (all items are consumers except grasses are producers).

Model 2

1 (A) 1. a 2. b 3. c 4. d
(B) Grass ⟶ Deer ⟶ Lion ⟶ Decomposer.

2 (A) 1. (✗) 2. (✗) 3. (✗) 4. (✓)
(B) Seeds can grow (germinate).

3 (A) 1. C – c 2. A – d
3. B – a 4. D – b
(B) Because it transports the produced glucose sugar from leaves to all other parts of the plant to grow.

November Tests

Model 1

1 (A) 1. bleaching – nursery.
2. solid state – gas state.
3. small fish – microorganisms
4. solid – gas
(B) Because particles of liquids can slide over each other.

2 (A) 1. (✓) 2. (✓) 3. (✓) 4. (✗)
(B) Light. (all items are considered matter while light is an energy).

3 (A) 1. Nursery.
2. Coral bleaching.
3. Measuring tape.
4. Matter.
(B) The ecosystem may be destroyed.

Model 2

1 (A) 1. b 2. c 3. b 4. a
(B) It will increase.

2 (A) 1. Habitat restoration.
2. Water pollution. 3. Model.
4. Normal microscope.
(B) Because sharks feed on different fish that depend on algae to get their food.

3 (A) 1. solid – gas.
2. turtles – plastic
3. shape – volume.
4. increase – decrease
(B) 1. food web. 2. mouse

PART 3

Guide Answers of
Final Examinations



PART 3 Model Examinations

El-Moasser Final Examination Models

Model Exam 1

1 (A) 1. c 2. c 3. b 4. c
(B) To protect the desert home from dust and dirt.

2 (A) 1. (✓) 2. (✗) 3. (✓) 4. (✗)
(B) It can't make photosynthesis process and it will die.

3 (A) 1. pollution.
2. consumers – decomposers
3. stomata
4. physical – chemical
(B) 1. Wood. (all items are liquids, while wood is solid).
2. Sunlight. (all items are parts of the plant, while sunlight is an energy).

Model Exam 2

1 (A) 1. melts
2. chemical
3. steel – hard
4. balance – thermometer
(B) The speed of particles will increase.

2 (A) 1. Population. 2. Prey.
3. Water.
4. Plant's root.
(B) To get his needed energy to do his activities.

3 (A) 1. c 2. a 3. e 4. d
(B) 1. white. 2. wood

Model Exam 3

1 (A) 1. (✗) 2. (✗) 3. (✓) 4. (✗)
(B) The magnet attracts the iron nail but it doesn't attract the plastic spoon.

2 (A) 1. shelter. 2. overfishing.
3. predator 4. toxic
(B) 1. leaves 2. roots

3 (A) 1. Melting process.
2. Volume. 3. Globe.
4. Tertiary consumers.
(B) Because the temperature of ice increases so, it will melt and becomes liquid.

Model Exam 4

1 (A) 1. Plant' reproduction.
2. Producers.
3. Seabirds.
4. Solid state.
(B) Because helium is lighter than air.

2 (A) 1. (✓) 2. (✗) 3. (✗) 4. (✓)
(B) Water and nutrients will not move up from the roots to the leaves.

3 (A) 1. b 2. c 3. b 4. a
(B) 1. (✗) 2. (✓) 3. (✗) 4. (✗)

Model Exam 5

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

2 (A) 1. ecosystem.
2. hot – cold
3. flammable – poisonous
4. stomata
(B) Because by increasing temperature, it will gain thermal energy and changed into liquid water.

3 (A) 1. Physical changes.
2. Evaporation process.
3. Measuring tape.
4. Top predators.
(B) The plant can't absorb the energy of sunlight, so it can't make photosynthesis process.

Model Exam 6

1 (A) 1. sugar – leaves
2. carbon dioxide gas – water
3. decomposers – primary consumers
4. liquid – shape
(B) To protect this home from animals getting inside.

2 (A) 1. c 2. a 3. c 4. c
(B) 1. c 2. d 3. a

3 (A) 1. (✓) 2. (✓) 3. (✗) 4. (✓)
(B) The microorganisms will move to a cooler water.

Model Exam 7

1 (A) 1. Overfishing.
2. Oxygen gas.
3. Plant transport system.
4. Temperature.
(B) The temperature of the matter will decrease.

2 (A) 1. (✓) 2. (✓) 3. (✗) 4. (✗)
(B) Because it absorbs the energy of sunlight that helps the plant to make photosynthesis process.

3 (A) 1. d 2. c 3. d 4. b
(B) 1. (B)
2. (C) – (A) – (B)
3. (C)

Model Exam 8

1 (A) 1. (✓) 2. (✗) 3. (✓) 4. (✓)
(B) Because it is not flammable and not poisonous.

2 (A) 1. c 2. b 3. b 4. a

(B) The speed of particles will increase.

3 (A) 1. liquid 2. space
3. solid – gas. 4. particles.

(B) 1. c 2. a

Model Exam 9

1 (A) 1. a 2. d 3. b 4. c

(B) The water of the lake decreases due to evaporation and may completely disappear.

2 (A) 1. physical 2. odor
3. rough 4. chemical

(B) Because in these processes the matter changes without any change in its structure.

3 (A) 1. (✗) 2. (✓) 3. (✓) 4. (✓)

(B) 1. solid 2. increase

Model Exam 10

1 (A) 1. (✓) 2. (✗) 3. (✗) 4. (✗)

(B) 1. plants
2. Carbon dioxide

2 (A) 1. Electron microscope.
2. Liquid state.
3. Photosynthesis process.
4. Flowers.

(B) Because it is a solid matter.

3 (A) 1. d 2. c 3. a 4. b

(B) 1. (1) 2. (2)

Final Examinations of Some Governorates

Cairo Governorate

1 Leaders Language School

1 (A) 1. (✓) 2. (✗)
3. (✓) 4. (✗)

(B) Oxygen. (all items are solids, while oxygen is a gas).

2 (A) 1. Oxygen 2. Consumers
3. decomposers.
4. Oil

(B) The plant can't absorb the energy from sunlight and can't make photosynthesis process.

3 (A) 1. a 2. b 3. c 4. b

(B) Grass ⟶ Rabbit ⟶ Snake ⟶ Hawk.

2 Science Inspectorate

1 (A) 1. b 2. a 3. c 4. d

(B) b. Maple seeds, because they are light seeds.

2 (A) 1. b 2. d 3. c 4. a

(B) Because it transports the produced glucose sugar from the leaves to all other parts of the plant to grow.

3 (A) 1. (✓) 2. (✓)
3. (✗) 4. (✗)

(B) The ecosystem may be destroyed.

3 Hadayek El Kobba Edu. Zone

1 (A) 1. Freezing.
2. Plant transport system.
3. Decomposers.
4. Liquid state.

(B) Because it has no definite shape but it has definite volume.

2 (A) 1. c 2. c 3. b 4. b

(B) Gases can't move into or out of the plant's leaves and the plant will die.

3 (A) 1. (✓) 2. (✗)
3. (✗) 4. (✓)

(B) The force will increase and particles become closer to each other so, spaces between particles will decrease.

4 Science Inspectorate

1 (A) 1. b 2. b 3. b 4. c

(B) Because it has mass and volume.

2 (A) 1. chemical
2. evaporation
3. Freezing
4. Decomposers

(B) Grass ⟶ Rat ⟶ Snake ⟶ Hawk.

3 (A) 1. (✗) 2. (✗)
3. (✓) 4. (✗)

(B) Plant's leaves will be yellow and can't make photosynthesis process.

Giza Governorate

5 The Egyptian Inter. School

1 (A) 1. b 2. c 3. d 4. a

(B) Nursery.

2 (A) 1. light – chemical
2. coral bleaching.
3. compound.
4. physical – chemical

(B) To protect the desert home from dust and dirt.

3 (A) 1. (✗) 2. (✓)
3. (✓) 4. (✗)

(B) The temperature of the matter will decrease.

6 Awssem Educational Zone

1 (A) 1. c 2. c 3. a 4. c

(B) Microorganisms ⟶ Small fish ⟶ Seabird.

2 (A) 1. (✗) 2. (✓)
3. (✓) 4. (✓)

(B) Because plants make their own food in their leaves during photosynthesis process.

3 (A) 1. Model 2. producers.
3. carbon dioxide
4. chemical

(B) Secondary consumers.

Alexandria Governorate

7 East Educational Zone

1 (A) 1. a 2. b 3. b 4. c

(B) Because it feeds on primary consumers that feed on plants.

2 (A) 1. chemical 2. arteries
3. water 4. chlorophyll

(B) Stomata.

3 (A) 1. (✓) 2. (✗)
3. (✓) 4. (✗)

(B) The particles of the solid matter will move, vibrate and spin around faster.

8 Science Inspectorate

1 (A) 1. c 2. c 3. b 4. b

(B) Grass. (all items are consumers while grass are producers).

2 (A) 1. Phloem 2. Model
3. fungi. 4. particles.

(B) To get his needed energy to do his activities.

3 (A) 1. (✓) 2. (✗)
3. (✗) 4. (✗)

(B) Grass ⟶ Grasshopper ⟶ Frog ⟶ Snake ⟶ Owl.

Menoufia Governorate

9 Shebeen El-Koum Edu. Zone

1 (A) 1. Phloem 2. chemical
3. Reproduction 4. Gram

(B) Grass → Deer → Lion → Decomposer.

2 (A) 1. (✓) 2. (✗)
3. (✓) 4. (✗)

(B) Due to water become very warm, so coral reefs will get rid of the algae living in their tissues.

3 (A) 1. d 2. a 3. b 4. c

(B) It will break down into smaller pieces called microplastics.

El-Gharbia Governorate

10 Science Inspectorate

1 (A) 1. steel – hard
2. oxygen – nutrients
3. decomposers – decaying or dead organisms.
4. physical – chemical

(B) They can find food easily, as they feed on small fish which feed on microorganisms that live in cold water.

2 (A) 1. Tape measure.
2. Carbon dioxide gas.
3. Population.
4. Xylem (Stem).

(B) Because when the water vapor hits cooler air, it condenses into tiny droplets which looks like small white clouds that are visible.

3 (A) 1. (✗) 2. (✗)
3. (✓) 4. (✗)

(B) 1. Sea star.
2. Primary consumers on marine food web.

Kafr El-Sheikh Governorate

11 Science Inspectorate

1 (A) 1. c 2. b 3. b 4. c

(B) Coral bleaching.

2 (A) 1. (✗) 2. (✗)
3. (✓) 4. (✗)

(B) Because it is formed of some gases.

3 (A) 1. copper – rubber.
2. liquid 3. gas

(B) The water will evaporate leaving the salt in the container.

Beheira Governorate

12 Science Inspectorate

1 (A) 1. c 2. b 3. b 4. a

(B) Because decomposers return nutrients of dead organisms back to the soil.

2 (A) 1. Coral bleaching.
2. Ceramic tiles.
3. Conduction.
4. Predator.

(B) The plant can't produce seeds that help it to reproduce.

3 (A) 1. (✓) 2. (✗)
3. (✗) 4. (✓)

(B) Grass ⟶ Rabbit ⟶ Snake ⟶ Hawk.

Fayoum Governorate

13 Science Inspectorate

1 (A) 1. c 2. c 3. a 4. d

(B) - It transports water and nutrients from the roots to the rest of the plant through xylem.
- It supports leaves and flowers of the plant.

2 (A) 1. (✓) 2. (✓)
3. (✗) 4. (✓)

(B)

The producer organisms	The consumer organisms
- They are organisms that can make their own food and don't feed on other plants or animals. Example : Plants.	- They are organisms that eat other living organisms to get their energy, because they cannot make their own food. Example : Birds.

3 (A) 1. b 2. a 3. d 4. c

(B) 1. food web.
2. mouse – frog.

Assiut Governorate

14 Science Inspectorate

1 (A) 1. a 2. c 3. b 4. a

(B) Because helium is lighter than air.

2 (A) 1. (✗) 2. (✗)
3. (✓) 4. (✓)

(B) Grass ⟶ Rabbit ⟶ Snake ⟶ Hawk.

3 (A) 1. flower 2. Oxygen
3. small fish.
4. coral bleaching

(B) 1. Melting 2. Evaporation

Sohag Governorate

15 Science Inspectorate

1 (A) 1. a 2. d 3. a 4. c

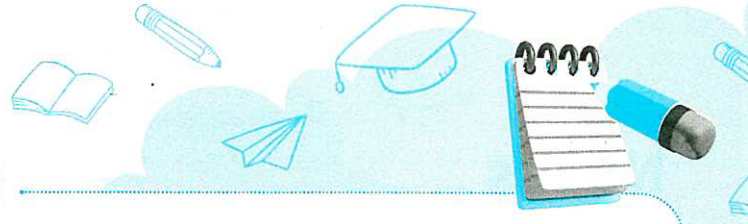
(B) Because they help the plant to absorb water and nutrients from the soil.

2 (A) 1. food web. 2. circulatory
3. evaporation 4. gas

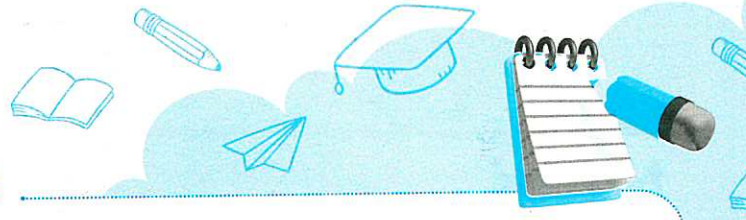
(B) It will increase.

3 (A) 1. (✗) 2. (✓)
3. (✗) 4. (✗)

(B) 1. Copper. 2. Steel.



Notes



Notes

NOW

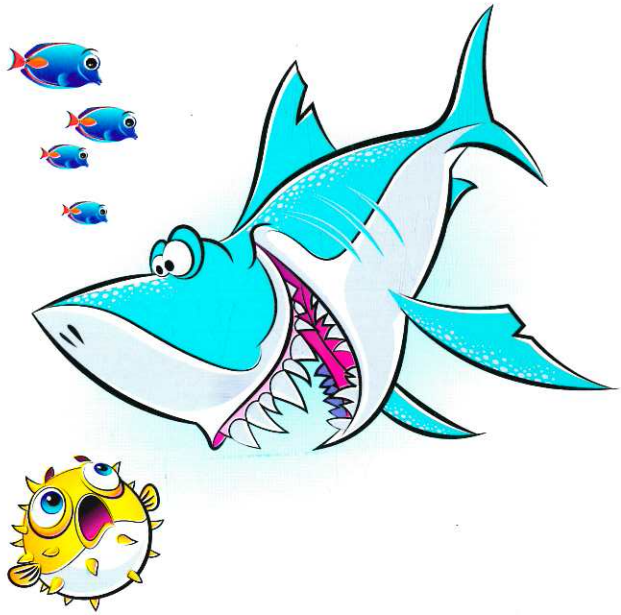
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