

PONY

سلسلة كتب الاستاذ

# SCIENCE

2029

FINAL

REVISION

5

PRIMARY  
FIRST TERM

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# Concept

# 1.1

Q1

Choose the correct answer:

- The ..... absorb(s) water and salts from the soil.  
a. stem                      b. leaves                      c. roots
- The ..... deliver(s) water and salts from the roots to the plant leaves.  
a. stem                      b. leaves                      c. roots
- The process of photosynthesis occurs in the .....  
a. stem                      b. flowers                      c. leaves
- The needs of plants and animals are similar in all the following, except .....  
a. water                      b. air                      c. method of obtaining food
- ..... is one of the basic needs of plants.  
a. Soil                      b. Air                      c. Oxygen
- The plant makes its food, which is ....., through the process of photosynthesis.  
a. sugar                      b. protein                      c. seeds
- Root hairs help in ..... the amount of water that the plant can take from the soil.  
a. decreasing                      b. increasing                      c. not changing
- Phloem vessels carry glucose down from the ..... to the rest of the plant parts.  
a. leaves                      b. stems                      c. roots
- During photosynthesis, plants release ..... into the air so that we can breathe.  
a. carbon dioxide                      b. oxygen                      c. sugar
- Xylem vessels are tubes that allow water to move ..... from the roots to other parts of the plant.  
a. down                      b. up                      c. in its place
- ..... is a component within a plant that absorbs sunlight during photosynthesis.  
a. Chlorophyll                      b. Stomata                      c. Xylem

- 12 Air passes through small openings in the leaves of the plant called ..... .  
a. xylem                      b. chlorophyll                      c. stomata
- 13 The potato plant is known to have a/an ..... stem that extends underground.  
a. tuber                      b. extension                      c. climber
- 14 The blood rich in oxygen moves inside the body from the heart to the body's organs through the ..... .  
a. phloem                      b. veins                      c. arteries
- 15 In the process of photosynthesis, light energy is converted into ..... energy.  
a. gravitational                      b. thermal                      c. chemical
- 16 The process of transporting seeds from one place to another is called ..... .  
a. seed germination                      b. transpiration  
c. seed dispersal
- 17 The blood rich in carbon dioxide returns to the heart through the ..... .  
a. arteries                      b. veins                      c. phloem
- 18 The human transportation system is called the ..... system.  
a. digestive                      b. circulatory                      c. respiratory
- 19 The plant absorbs ..... gas during the process of photosynthesis.  
a. oxygen                      b. carbon dioxide  
c. nitrogen
- 20 The ..... is considered an organ of the circulatory system.  
a. skin                      b. heart                      c. brain
- 21 The heart consists of ..... chambers.  
a. three                      b. four                      c. five
- 22 There are several types of leaves, including wide flat leaves, such as the leaves of ..... .  
a. banana trees                      b. pine trees                      c. grapes

**Q2 Put (✓) or (X):**

- 1 The roots absorb light from the Sun. ( )
- 2 Soil is considered a basic need for plant growth. ( )
- 3 The plant absorbs water from the soil through the root. ( )
- 4 The plant uses natural resources to grow and flourish. ( )
- 5 Photosynthesis occurs in plant seeds. ( )
- 6 Chlorophyll gives the plant its distinctive green color. ( )
- 7 The xylem carries glucose from the leaves to the rest of the plant. ( )
- 8 A plant does not need sunlight in the process of photosynthesis. ( )
- 9 The arteries and veins in the human body are similar to the vessels of xylem and phloem in plants that transport water and food. ( )
- 10 Glucose provides the plant with the energy needed for growth and survival. ( )
- 11 Blood moves in the arteries and veins in two directions. ( )

**Q3 Mention the scientific term:**

- 1 They're stems that extend horizontally on the surface of the Earth and help in the formation of new plants, such as the strawberry plant. ( ..... )
- 2 They're small openings (holes) in the leaves of the plant through which air passes. ( ..... )
- 3 It's a process that occurs inside the leaves of the plant to make its food. ( ..... )
- 4 They're thick and solid stems, such as the roots of trees and shrubs. ( ..... )
- 5 It's a substance responsible for the green color of the plant. ( ..... )
- 6 They're vessels in the plant that are responsible for transporting nutrients from the leaves to all parts of the plant. ( ..... )
- 7 They're vessels that transport water and nutrients from the roots to all parts of the plant. ( ..... )
- 8 They're vessels that transport the blood rich in carbon dioxide and a little oxygen and nutrients from parts of the body to the heart. ( ..... )
- 9 It's a group of vessels (tubes) that transport important nutrients in one direction between parts of the plant. ( ..... )

- 10 They're small, dark parts located in the middle of the sunflower. ( ..... )
- 11 They're the reproductive parts of the plant. ( ..... )
- 12 It's the process of transferring seeds from one place to another. ( ..... )

#### Q4 What is meant by:

- The process of photosynthesis.

.....

.....

.....

#### Q5 Complete the following sentences:

- 1 Plants get ..... and ..... from the soil.
- 2 The ..... help the plant get water from the soil.
- 3 ..... and water are considered basic needs for the growth and survival of living organisms.
- 4 The energy source of a plant is .....
- 5 During photosynthesis, light energy is transformed into ..... energy.
- 6 The plant needs ..... gas, water, and sunlight to carry out the photosynthesis process.
- 7 If the appropriate conditions are available for the seeds, they grow and form .....
- 8 Plant cells depend on ..... as a source of energy and growth.
- 9 The process of ..... is the production of new individuals of the same species.
- 10 Flowers in plants perform the function of .....
- 11 Coconut seeds are transmitted by .....
- 12 ..... gas is produced through the process of photosynthesis and humans use it for breathing.
- 13 The transport system in plants is similar to the ..... system in humans.
- 14 There are three types of blood vessels in the human circulatory system: ....., ....., and blood capillaries.

Q6

**State the scientific reason:**

- 1 Plants need sunlight to survive.  
.....
- 2 The human body needs water and food daily.  
.....
- 3 The little squirrel needs food.  
.....
- 4 Sugar is not a basic need for plants.  
.....
- 5 There are root hairs in the plant root.  
.....
- 6 A plant does not grow well in a paper towel.  
.....
- 7 Dandelion seeds spread in the presence of wind.  
.....

Q7

**What happens if:**

- 1 A green plant is placed in a dark place for a week?  
.....
- 2 A plant obtains natural resources?  
.....
- 3 A plant does not have roots?  
.....
- 4 A plant does not have natural resources?  
.....
- 5 A green plant is placed in a dark place for a period of time?  
.....
- 6 The roots disappear from a plant?  
.....

7 Plants disappear from the surface of the Earth?

.....  
 .....

8 The seed of a plant fall on an unsuitable environment?

.....  
 .....

9 A plant is left without water for long periods?

.....  
 .....

10 A seed of a plant falls on a suitable environment?

.....  
 .....

**Q8 Answer the following questions:**

1 What role do the leaves play in helping a plant get food?

.....  
 .....

2 What role does the stem play in helping a plant get food?

.....  
 .....

3 What role do the roots play in helping a plant get food?

.....  
 .....

4 The plant stem has many different shapes, mention them.

.....  
 .....

5 What are the differences between the needs of humans and plants?

Humans Needs	Plants Needs
.....	.....
.....	.....
.....	.....
.....	.....
.....	.....

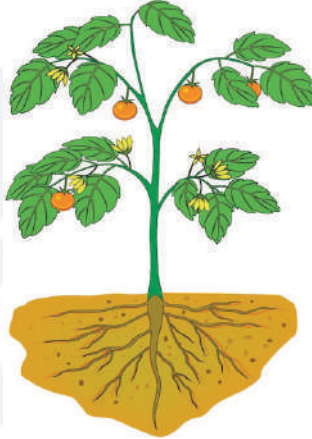
6 What does the picture in front of you indicates?

.....



7 Put each word in its correct place.

Roots – Stem – Leaves – Flower



8 Look at the two pictures and answer:

What are the types of tree leaves in front of you?



.....



.....

9 In front of you is a plant whose shape has changed from picture (1) to picture (2). What is the reason for that?



.....  
.....

10 Look at the pictures in front of you, then complete:

- a. The xylem vessel is represented by shape ..... and it carries .....
- b. The phloem vessel is represented by shape ..... and it carries .....





11 Look at the picture in front of you.

- a. What is the name of the small, dark things in the middle of the flower? .....
- b. What is their importance to plants?  
.....  
.....



12 Notice the pictures of the following seeds and complete the table:

Seed	Dispersal Method
	<p>.....</p>
	<p>.....</p>

# Concept

# 1.2

Q1

Choose the correct answer:

- 1 ..... belong(s) to the nonliving components of the ecosystem.  
a. Animals      b. Plants      c. Soil      d. Insects
- 2 ..... are among the organisms that produce food.  
a. Animals      b. Plants      c. Soils      d. Humans
- 3 Fungi are found in the ..... of the food chain.  
a. beginning      b. middle      c. end      d. start
- 4 ..... obtain energy directly from the Sun.  
a. Plants      b. Humans      c. Animals      d. Insects
- 5 Which of the following represents a correct food chain?  
a. Hawk → Grass → Bacteria → Rabbit → Snake.  
b. Grass → Rabbit → Bacteria → Hawk → Snake.  
c. Grass → Rabbit → Snake → Hawk → Bacteria.
- 6 ..... organisms increase soil fertility.  
a. Producer      b. Carnivore      c. Herbivore      d. Decomposer
- 7 All the following are considered as producer organisms, except .....  
a. carrot      b. rabbit      c. grass      d. cactus
- 8 Which of the following is a correct example of a food chain?  
a. Mouse → Snake → Grass.      b. Rabbit → Carrots → Bacteria.  
c. Grass → Deer → Bacteria.      d. Hawk → Fish → Algae.
- 9 Which of the following organisms could end the food chain?  
a. Mouse and snake      b. Rabbit and carrots  
c. Grass and cactus      d. Bacteria and fungi
- 10 A food chain begins with .....  
a. decomposers      b. producers      c. consumers      d. humans
- 11 A plant obtains energy directly from the .....  
a. moon      b. animals      c. Sun      d. humans
- 12 ..... organisms are responsible for returning the organic elements to the soil.  
a. Producer      b. Consumer      c. Decomposers      d. Predators

- 13 Energy passes between living organisms through the .....
- a. ecosystem      b. water      c. air      d. soil
- 14 Which of the following are decomposers?
- a. Locusts      b. Hawks      c. Grass      d. Bacteria
- 15 All the following are considered consumer organisms, except .....
- a. owls      b. rabbits      c. algae      d. grasshoppers
- 16 Energy passes from the Sun to the consumer organisms through .....
- a. predator      b. producer      c. decomposer      d. prey

Q2

Put (✓) or (X):

- 1 The lion is a consumer organism. ( )
- 2 Humans are the main source of energy on Earth. ( )
- 3 In the ecosystem, energy is transferred from one organism to another. ( )
- 4 Light seeds are spread by wind. ( )
- 5 A food chain begins with consumers. ( )
- 6 An ecosystem is several interconnected food chains. ( )
- 7 A snake is an example of a predator and prey in some food chains. ( )

Q3

Mention the scientific term:

- 1 It is the path of energy flow from one organism to another. (.....)
- 2 It is a process in which the plant obtains energy. (.....)
- 3 It is a system consisting of living organisms and nonliving things. (.....)
- 4 It is the main source of energy on Earth. (.....)
- 5 They are organisms that produce their own food. (.....)
- 6 It is a group of different food chains that interact together. (.....)

**Q4 Complete the following sentences:**

- 1 The main source of energy on the surface of the Earth is .....
- 2 An ecosystem consists of ..... and .....
- 3 ..... feed on the remains of dead organisms.
- 4 ..... are consumer organisms.
- 5 Energy is transferred from ..... to consumers through the food chain.
- 6 An animal that feeds on another animal is called .....
- 7 Fish and birds are ..... organisms.
- 8 A food chain ends with ..... organisms.
- 9 When a fox feeds on a rabbit, the rabbit is called .....
- 10 The interconnection of a group of food chains is known as a .....
- 11 The food chain begins with a ..... organism.
- 12 Light seeds are spread by .....
- 13 The organisms responsible for returning organic elements to the soil are the ..... s.

**Q5 Give reasons for:**

- 1 Trees are considered as producers.  
.....  
.....
- 2 The food web is a system of energy flow.  
.....  
.....

**Q6 What happens if:**

- 1 Decomposers disappear?  
.....  
.....
- 2 Sunlight does not reach the Earth?  
.....  
.....

**Q7 Answer the following:****Q1. Mention:**

1 One example of a decomposer organism.

.....

2 One example of a consumer organism.

.....

3 One example of a producer organism.

.....

4 The way of sticky and rough seeds dispersal.

.....

5 The role of decomposers in the food chain.

.....

.....

6 The importance of the earthworms to the soil.

.....

**Q2. Explain the following statements:**

a. A plant needs sunlight.

.....

b. A food web is an energy flow system.

.....

.....

**Q3. Create food chains from the following organisms.**

a. Rabbits – Grass – Hawks – Snakes

.....

b. Insects – Snakes – Grass – Frogs – Hawks

.....

c. Rabbits – Carrots – Snakes – Bacteria – Hawks

.....

d. Mice – Grass – Hawks – Snakes

.....

# Concept

# 1.3

Q1

Choose the correct answer:

- The drying up of lakes leads to a/an ..... in the ecosystem.  
a. stability      b. imbalance      c. strength      d. balance
- When the grass in the ecosystem decreases, the number of rabbits .....  
a. increases      b. is not affected      c. decreases      d. remains the same
- Which of the following organisms begins the marine ecosystem?  
a. Algae      b. Mollusks      c. Sharks      d. Grass
- A cactus is considered a ..... organism in the desert food web.  
a. producer      b. consumer      c. decomposer      d. prey
- The ..... is created to preserve marine organisms in their ecosystem.  
a. desert      b. aquarium      c. protected marine environment
- All the following cause disruption to food webs in the desert environment, except .....  
a. drought      b. light rain      c. pollution      d. floods
- Algae are found in the ..... of the marine food chain.  
a. beginning      b. middle      c. end      d. last
- Which of the following organisms begins the food chain in the desert environment?  
a. Rabbit      b. Fox      c. Grass      d. Algae
- All the following organisms are affected by plastic materials in water, except .....  
a. seabirds      b. algae      c. whales      d. sea turtles
- ..... are considered homes to many fish.  
a. Microorganisms      b. Marine algae      c. Sea turtles      d. Coral reefs
- ..... is considered one of the human activities that negatively affect the marine environment.  
a. Loss of algae      b. Climate change  
c. Throwing plastic materials into the seas  
d. Recycling plastic

- 12 A food chain in the ocean begins with .....  
 a. small fish.      b. microorganisms      c. sea turtles      d. starfish
- 13 Overfishing leads to a/an ..... in the number of marine organisms.  
 a. increase      b. growth      c. decrease      d. a lot of
- 14 All the following happen when the temperature of water rises in the oceans, except .....  
 a. increased numbers of microorganisms  
 b. corals get rid of algae  
 c. small fish move to other areas      d. coral bleaching
- 15 Microorganisms need ..... water to survive.  
 a. moderate      b. cold      c. hot      d. warm
- 16 ..... cause the death of marine organisms when feeding on them.  
 a. Floods      b. Plants  
 c. Algae      d. Plastic materials
- 17 The phenomenon of coral bleaching happens as a result of ..... water temperature.  
 a. rising      b. moderating      c. decreasing      d. constant
- 18 ..... is considered one of the causes of disruption in the marine environmental web.  
 a. Habitat restoration      b. Nursery  
 c. Overfishing      d. Heavy rain

Q2

Put (✓) or (X):

- 1 An ecosystem is affected when decomposers disappear. ( )
- 2 A food chain in the desert environment begins with algae. ( )
- 3 The octopus is an example of a producer organism in the marine ecosystem. ( )
- 4 Heavy rain leads to a disruption in the desert ecosystem. ( )
- 5 Coral reefs are habitats to many fish. ( )
- 6 Loss of habitat is one of the most important causes of extinction. ( )
- 7 Recycling plastics contributes to preserving the ecosystem. ( )
- 8 Plastic materials have a positive effect on marine organisms. ( )

## Final Revision

- 9 The number of living organisms decreases if climatic conditions are suitable. ( )
- 10 Human activities that occur on land effect the marine ecosystem. ( )

### Q3 Mention the scientific term:

- 1 It is the disappearance or death a species of marine organisms.  
(.....)
- 2 It is an area in the ocean where small pieces of corals are cared for.(.....)
- 3 They are small pieces of plastic material that are a grain of rice size.  
(.....)

### Q4 Complete the following sentences:

- 1 The absence of producers leads to the ..... of consumers.
- 2 Energy passes from ..... to locusts in the desert environment.
- 3 When producer organisms disappear from an ecosystem,  
..... organisms die.
- 4 The Island of Palau needs to establish a ..... to protect its waters from pollution.
- 5 Loss of habitat is one of the most important reasons for .....
- 6 Seabirds depend on ..... for their food.
- 7 Marine microorganisms move to a new habitat when there is a change in the .....
- 8 Algae are considered ..... organisms in the marine environment.
- 9 ..... causes plastic materials to break down into small particles.
- 10 Coral reefs turn white due to the ..... in water temperature.

### Q5 Give reasons for:

- 1 Sea turtles eat a lot of plastic materials.  
.....
- 2 The phenomenon of coral bleaching occurs.  
.....  
.....

Q6

**What happens if:**

1 Drought occurs in an ecosystem?

.....

.....

2 Grass disappears from the desert ecosystem?

.....

.....

3 The water temperature increases for microorganisms?

.....

.....

4 The amount of plastic materials in the marine environment increases?

.....

.....

5 Living organisms cannot adapt to climate changes?

.....

.....

Q7

**Answer the following questions****Q1. Mention:**

1 Some methods that are used to reduce pollution of the marine environment with plastic materials.

.....

.....

2 One of the causes of habitat loss.

.....

.....

3 The importance of the nursery.

.....

.....

**Q2. Create a food chain from the following organisms:**

● Sea urchins – Sharks – Algae – Parrotfish

.....

.....

# Concept

# 2.1

Q1

Choose the correct answer:

- Which of the following substances consists of particles that are closely connected to each other?  
a. Helium gas      b. Wood      c. Water vapor      d. Cooking oil
- The matter consists of a group of .....  
a. organs      b. devices      c. gases      d. particles
- The atmospheric air is considered a ..... matter.  
a. solid      b. frozen      c. liquid      d. gaseous
- Which of the following is not considered a matter?  
a. Wood      b. Air      c. Light      d. Water
- Pens and rulers are examples of ..... matter.  
a. solid      b. liquid  
c. gaseous      d. all the previous
- The particles of matter are very close to each other in the state of .....  
a. oxygen      b. water      c. oil      d. iron
- Water is found in nature in ..... states.  
a. three      b. four      c. five      d. six
- Everything that has mass and occupies space is called .....  
a. volume      b. state      c. matter      d. mass
- The distances between the particles of a gaseous matter are ..... the distances between the particles of a liquid matter.  
a. double      b. greater than      c. equal to      d. smaller than
- The ..... is considered a similar copy to the real thing to illustrate its shape or the way it works.  
a. energy      b. particle      c. model      d. matter
- A ..... matter has a fixed volume and a variable shape.  
a. solid      b. liquid      c. frozen      d. gaseous
- Which of the following consists of particles that are interconnected and very close together?  
a. Edible oil      b. Water vapor      c. Helium      d. Wood

- 13 The movement of water particles is slower than the movement of ..... .  
 a. oil                      b. cars                      c. hydrogen                      d. juice
- 14 The steam rising from food is an example of a ..... state.  
 a. solid                      b. liquid                      c. gaseous                      d. frozen
- 15 Which of the following substances can be poured?  
 a. Salt                      b. Water vapor                      c. Milk                      d. Air

**Q2 Put (✓) or (X):**

- 1 Sound is a form of energy. ( )
- 2 Ice turns into a liquid by cooling. ( )
- 3 A gaseous matter does not occupy space. ( )
- 4 Milk has a fixed shape whatever the shape of the container is. ( )
- 5 The same substance can exist in nature in more than one state. ( )
- 6 When we press on a balloon, its volume increases. ( )
- 7 Models help us understand how things work. ( )
- 8 The particles of solid matter spread very quickly. ( )
- 9 Germs can be seen with the naked eye. ( )
- 10 Solids, liquids, and gases have a specific shape in common. ( )
- 11 A gaseous matter has a fixed volume and an unstable shape. ( )

**Q3 Mention the type of each of the following matters:**

Oil – Book – Apple – Water vapor – Table – Ruler – Helium – Tree – Vinegar

.....

.....

.....

**Q4 Write what the following statements mean:**

- 1 It is the amount of space occupied by a body. (.....)
- 2 It is a matter whose particles are not interconnected and move completely freely. (.....)
- 3 They are the small units that make up matter. (.....)
- 4 It is the state of water after freezing. (.....)

- 5 It is a copy of something to show what it looks like or how it works. (.....)
- 6 It is a state of matter whose shape is variable and volume is constant. (.....)
- 7 They are the building units of matter. (.....)

**Q5 Complete the following sentences:**

- 1 Matter can exist in **3** states.
- 2 Matter can be poured in the ..... state.
- 3 Sound is considered a form of .....
- 4 Everything that has mass and occupies space is called .....
- 5 Water can exist in a solid state in the form of .....
- 6 The particles of matter are very close together in ..... matter.
- 7 The particles of a ..... matter spread very quickly.
- 8 A ..... matter can be poured, but a solid matter cannot be poured.
- 9 A pen is an example of a ..... matter.
- 10 The ..... state of water changes when it is heated or cooled.
- 11 Matter consists of small units called .....
- 12 Gases have ..... shape and volume.
- 13 A ..... matter has a fixed shape and volume.
- 14 The shape of a ..... matter and its volume are variable.

**Q6 Mention the importance of:**

- 1 Earth model. ....  
.....  
.....
- 2 Solar system model.  
.....  
.....  
.....

**Q7 Compare between:**

- The solid, liquid, and gaseous states in terms of:

\* The arrangement of particles

\* Strength of the bond between them

P.O.C	Solid	Liquid	Gaseous
Arrangement of Particles	..... ..... ..... .....	..... ..... ..... .....	..... ..... ..... .....
Strength of Bond	..... .....	..... .....	..... .....

**Q8 Give reasons for:**

1 Vinegar takes the shape of the container that it is placed in.

.....

2 Oxygen has an indefinite shape and volume.

.....

3 The cup has a definite shape and volume.

.....

**Q9 What happens if:**

1 You put a bottle of water in the freezer?

.....

2 You expose a piece of ice to the Sun for a long time?

.....

3 Water is exposed to a high temperature?

.....

4 You press on an inflated balloon?

.....

5 Water is exposed to a low temperature?

.....

# Concept 2.2

Q1

Choose the correct answer:

- We use the ..... unit to measure the mass of the body.  
a. liter  
b. kilogram  
c. meter  
d. cubic centimeter
- All the following are chemical properties of matter, except .....  
a. burning  
b. combustion  
c. color  
d. rust
- We use a ..... to measure temperature.  
a. ruler  
b. thermometer  
c. measuring cup  
d. common balance
- The amount of matter that the body contains is known as .....  
a. volume  
b. temperature  
c. mass  
d. length
- A tape measure is used to measure the .....  
a. temperature  
b. weight  
c. volume  
d. length
- The ..... is known as the space occupied by a body.  
a. mass  
b. volume  
c. length  
d. temperature
- We use a ..... to measure the mass of a book.  
a. measuring cup  
b. measuring tape  
c. common balance  
d. thermometer
- The ..... is considered one of the chemical properties of matter.  
a. color of apples  
b. smell of vinegar  
c. burning of a paper  
d. color of gold
- 5 liters = .....  $\text{cm}^3$   
a. 0.5  
b. 50  
c. 500  
d. 5,000
- ..... is used in making car tires.  
a. Copper  
b. Helium  
c. Rubber  
d. Glass
- ..... floats above the surface of water.  
a. Iron  
b. Aluminum  
c. Wood  
d. Copper
- Which of the following properties of matter cannot be measured?  
a. Length  
b. Mass  
c. Taste  
d. Volume

- 13 ..... is considered one of the matters that are attracted to magnets.
- a. Plastic                      b. Wood                      c. Iron                      d. Cork
- 14 ..... is used to make medical glasses.
- a. Helium                      b. Glass                      c. Rubber                      d. Iron
- 15 A ..... is used to measure the volume of a matter.
- a. common balance                      b. measuring tape  
c. measuring cup                      d. thermometer
- 16 All the following describe the physical properties of matter, except the .....
- a. texture                      b. taste                      c. iron rust                      d. color
- 17 All the following are units of mass measurement, except .....
- a. tons                      b. grams                      c. liters                      d. kilograms

Q2

Put (✓) or (X):

- 1 The shapes of houses vary from one environment to another. ( )
- 2 A ruler is used to measure the mass of objects. ( )
- 3 The texture of the fabric is one of the chemical properties of the matter. ( )
- 4 Iron rust is considered a physical change in the matter. ( )
- 5 Temperature expresses the speed of particles movement in the matter. ( )
- 6 It is possible to distinguish between iron and gold using the sense of smell. ( )
- 7 Balloons are filled with helium gas. ( )
- 8 Wood is a good conductor of electricity. ( )
- 9 A measuring cup is used to measure the temperature. ( )
- 10 The mass of matter changes from one state to another. ( )
- 11 Shape and volume are physical properties of matter. ( )
- 12 The roof of a desert house is similar to the roof of a house in a tropical forest. ( )

**Q3 Write what the following statements mean:**

- 1 It is a non-toxic material used to fill air balloons. (.....)
- 2 It is the ability of a material to transfer electricity and heat through it. (.....)
- 3 They are the properties that can be observed using the five senses. (.....)

**Q4 Complete the following sentences:**

- 1 The ..... of matter is measured by a measuring cup.
- 2 The length of a classroom can be measured by ..... unit.
- 3 3 kilograms = ..... grams.
- 4 Iron rust is an example of the ..... properties of a matter.
- 5 Color, taste, and smell are the ..... properties of a matter.
- 6 ..... is used to measure the volume of a matter.
- 7 ..... gas is used to fill balloons.
- 8 ..... is used to make electrical wires because it is a good conductor of electricity.
- 9 ..... is used to make cooking utensils.
- 10 The roof of the house is sloping in places with ..... weather.
- 11 Thermal conduction is one of the ..... properties of matter.
- 12 The roof of the house is flat in places with ..... weather.

**Q5 Mention one of the uses of:**

- 1 Copper: .....  
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- 2 Helium: .....
- 3 Glass: .....

**Q6 Give reasons for:**

- 1 Cookware handles are made of plastic not metal.  
.....  
.....

2 Glass is used to make electric lamps.

.....

3 Wood is not used to make electrical wires.

.....

Q7

### What happens if:

1 The particles of the matter are interconnected and close in relation to their density?

.....

2 The density of the substance is greater than the density of the liquid?

.....

3 The density of the matter is less than the density of the liquid?

.....

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# Concept 2.3

Q1

Choose the correct answer:

- The mass of ice after melting is ..... its mass before melting.  
a. double      b. greater than      c. equal to      d. less than
- When water is placed in the freezer, it turns into ice as a result of .....  
a. melting      b. freezing      c. filtration      d. evaporation
- The process of freezing is the reverse process of .....  
a. boiling      b. melting      c. condensation      d. evaporation
- Examples of physical processes include .....  
a. iron rusting      b. wood burning  
c. paper burning      d. making a fruit salad
- Liquid chocolate can be returned into its solid state by .....  
a. heating      b. cooling      c. evaporation      d. condensation
- The speed of particles movement increases in the process of .....  
a. freezing      b. melting      c. condensation      d. cooling
- The components of a mixture of sand and water are separated by .....  
a. filtration      b. evaporation  
c. cooling      d. filtration and cooling
- Condensation is the change of matter from the ..... state to the liquid state.  
a. solid      b. gaseous      c. physical      d. chemical
- A chemical change occurs when ..... a paper.  
a. bending      b. cutting      c. burning      d. grinding
- The melting of wax is considered a/an ..... change.  
a. environmental      b. chemical      c. organic      d. physical
- ..... is considered a physical change.  
a. Bread making      b. Rock crushing      c. Iron rust      d. Wood burning

- 12 The mass of a mixture before mixing is ..... its mass after mixing.  
 a. greater than    b. equal to    c. smaller than    d. double
- 13 What is the correct order of water desalination steps?  
 a. Evaporation – Filtration – Condensation  
 b. Condensation – Filtration – Evaporation  
 c. Filtration – Evaporation – Condensation  
 d. Evaporation – Condensation – Filtration
- 14 All the following are physical changes, except .....  
 a. cutting vegetables    b. burning a paper  
 c. cutting cloth    d. melting ice
- 15 The formation of copper into wires is a/an ..... change.  
 a. thermal    b. chemical  
 c. environmental    d. **physical**
- 16 All the following are chemical changes of matter, except .....  
 a. burning wood    b. cutting fruits    c. food digestion    d. iron rust

Q2

Put (✓) or (X):

- 1 Heat is a form of matter. ( )
- 2 Melting is the transformation of ice into water. ( )
- 3 A mixture consists of only one substance. ( )
- 4 Changing the temperature affects the shape and mass of matter. ( )
- 5 When a liquid matter is heated, it turns into a solid state. ( )
- 6 Separating mixtures by evaporation requires raising the temperature. ( )
- 7 Grinding sugar is considered a physical change. ( )
- 8 The change in the state of water from a solid to a liquid is a chemical change. ( )
- 9 A physical change is a change in the form of matter only. ( )
- 10 The formation of rust on an iron nail is an evidence of chemical change. ( )
- 11 Salty sea water becomes drinkable after the filtration stage. ( )
- 12 Melting of wax produces a new substance, so this is considered a chemical change. ( )

Q3

Write what the following statements mean:

- 1 It is the process of changing matter from a solid state to a liquid state by raising the temperature. (.....)
- 2 It is the process of changing matter from a gaseous state to a liquid state. (.....)
- 3 It consists of two or more mixed substances that can be easily separated. (.....)
- 4 It is a red chemical crust resulting from the reaction of iron with oxygen. (.....)
- 5 It is a change in the shape, size, and state of matter. (.....)
- 6 It is a change in the composition of matter and a new substance is produced. (.....)

Q4

Complete the following sentences:

- 1 Water turns into steam as a result of ..... thermal energy.
- 2 ..... consists of two or more substances combined chemically.
- 3 The movement of matter particles increases when the temperature of the matter .....
- 4 The change of matter from a gaseous state to a liquid state is called .....
- 5 A mixture of a solid dissolved in water is separated by .....
- 6 The ..... consists of two or more substances that are not chemically combined.
- 7 A matter changes from a solid state to a liquid state when it ..... thermal energy.
- 8 Heat is one of the forms of .....
- 9 The transformation of ice into water is considered a ..... change.
- 10 ..... changes do not change the composition of matter.
- 11 Salty sea water becomes drinkable after the ..... stage.
- 12 The formation of gas bubbles when mixing an amount of vinegar with baking soda is an evidence of a ..... change in the matter.

- 13 Forming copper into wire is considered a ..... change.
- 14 Digestion of food within the body's cells is a ..... change.
- 15 Melting a piece of butter is a ..... change.

**Q5 Classify the change that occurs:**

- 1 Wax melting .....
- 2 Cloth bending .....
- 3 Wood burning .....

**Q6 What is meant by:**

- 1 Freezing
- .....

- 2 Melting
- .....

- 3 Condensation
- .....
- .....

**Q7 Give reasons for:**

- 1 Heat is not a matter.
- .....

- 2 The Earth's atmosphere is a mixture.
- .....
- .....

- 3 Melting is a physical change.
- .....

- 4 Burning wood is a chemical change.
- .....
- .....

- 5 Dissolving sugar in water is a physical change.
- .....

Q8

**What happens:**

- 1 To the mass of a matter when heated or cooled?  
.....  
.....
- 2 When we place a piece of ice in the Sun for a long period of time?  
.....  
.....
- 3 When water is cooled to a temperature below zero degrees Celsius?  
.....  
.....
- 4 When we mix vinegar and baking soda?  
.....  
.....
- 5 When iron is left in the air without coating.  
.....  
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