The Vision of the School: *Distinct Environment for Refined Education*

St Fatima Language Schools®
Al Hegaz

Work Sheet

Science

Primary 6



Name :.....

Class :.....

General Exercises on chapter (1)

- **Put (✓) or (✗):**

1. For things to keep burning, fresh air must constantly flow in and out. ( )
2. The flame burns stronger in case of a candle burning in the air than burning it in a closed bottle. ( )
3. Burning is a reaction between oxygen and a substance that produces heat and light. ( )

- **Choose the correct answer:**

1. **What happens to the burning when you put a lit incense stick into a jar of oxygen? Choose the correct answer from below.**
   ⓐ It becomes weaker. ⓑ It burns brightly. ⓒ The flame goes out.

2. **What happens when you put limewater in a jar with increased carbon dioxide and shake it? Choose the correct answer**
   ⓐ It turns yellow. ⓑ It turns blue. ⓒ It turns milky white.

3. **The gas that the flame uses up during burning is ..... gas.**
   ⓐnitrogen ⓑ oxygen ⓒCarbon dioxide

- **Give reasons for:**

1. The burning candle goes out inside a closed jar.
   ……
   ……

2. The candle flame keeps burning when it is placed in an open jar.
   ……
   ……

➢ **What happens...?**

1.To the amount of carbon dioxide gas in the air after the candle goes out.

……

……

2.To limewater when carbon dioxide gas passes through it.

……

……

➢ **Complete the following sentences using these words:**

(carbon dioxide - limewater - oxygen - air - hydrogen - nitrogen)

1. For things to keep burning, fresh ..... must constantly flow in and out.
2. ..... gas helps burning, while ..... gas and ..... gas do not help in burning.
3. During burning, a part of the ..... gas present in the surrounding air is consumed, and at the same time ..... gas is formed as a product of burning, and its formation is indicated by the turbidity of .....

➢ **Write the scientific term of each of the following:**

1. The gas whose percentage increases in the air as a result of burning things.

(……..……)

2. A colorless clear liquid that turns into milky white when it reacts with carbon dioxide gas. (……..……)
3. The gas produced from burning the candle that turns limewater into milky white.

(……..……)

- **Put (✓) or (✗):**

1.Things keep burning even if the place is closed and the air is not replaced. ( )

2.The gaps at the top and bottom of the jar allow a current of air to pass through, which helps burning to continue. ( )

3.Fresh air flowing in from the outside is very necessary for the candle flame to stay lit. ( )

- **Give reasons for:**

1- When leaving the jar open at the top and the bottom while the candle is burning.

……

……

2- When using up all the air inside a closed jar that has a burning candle.

……

……

- **What is meant by (Define):**

Burning.

……

……

- **Complete the following sentences:**

1.When the jar is opened at the top and completely closed at the bottom, the candle .....

2.The gas consumed by the flame and its amount decreases in the surrounding air is ..... gas.

3.Among the tools that are used to check gases are .....and .....

➢ **Correct the underlined words:**

1. **Burnt** air is what replaces the lack of oxygen inside a jar contains a burning candle to keep it lit.

   ……

2. The gas that helps burning in the atmospheric air is **nitrogen** gas.

   ……

3. Limewater changes from a clear liquid to a **blue** color when shaken with the products of burning.

   ……

➢ **Give one example of each of the following:**

1. A gas helps in burning.

   ……

2. A gas doesn't help in burning.

   ……

➢ **Write the scientific term**

1. A reaction between oxygen and a substance that produces heat and light.

   (……)

2. A mixture of several gases that surrounds us and is necessary for burning.

   (……)

➢ **Look at the opposite figure, then answer:**

1. What happen to the candle flame after covering the jar with a metal lid? And why?

   ……

2. What gas is produced during burning of the candle?

   ……



Chapter 2 : Respiration

Write the scientific term of each of the following:

1-The process in which air containing oxygen gas enters the body.

[……]

2-The process in which air rich in carbon dioxide gas leaves the body.

[……]

3- The process by which the body takes in oxygen and lets out carbon dioxide.

[……]

4-The gas that is produced from breathing out and turns limewater into milky white. [……]

5- The substance, which is used to test the presence of carbon dioxide.

[……]

Complete the following sentences:

1-Taking in air that is loaded with oxygen gas inside the body and then letting out air rich in carbon dioxide gas is called the…….. process.

2-During the breathing in process,…….. gas enters the human body.

3-The…… becomes milky white when a quantity of carbon dioxide gas passes through it.

4- During breathing in process, the chest moves……. while during breathing out process the chest moves ……..

5-The amount of oxygen gas in a certain volume of breathed-out air is…….. than the amount of carbon dioxide gas in the same volume of breathed-out air.

Give reasons for:

1-The lungs are considered as the main organ of respiration process.

……..…….

2-Blood rich in oxygen reaching all parts of the body.

……..…….

3- Fish depend on gills for breathing.

……..…….

What happens when...?

1-Passing breathed-out air through limewater.

……..……

2-Absence of the windpipe (trachea).

……..……

3-Catching a fish and placing it on land.

…….……

4-There is no blood vessels around alveoli.

……..

What is the function (or importance) of each of the following...?

1- Limewater:……..

2- Nose:……

3-The windpipe:…….

4-The lungs:……..

5-The gills of fish:……

Observe the following figure then complete the following sentences:

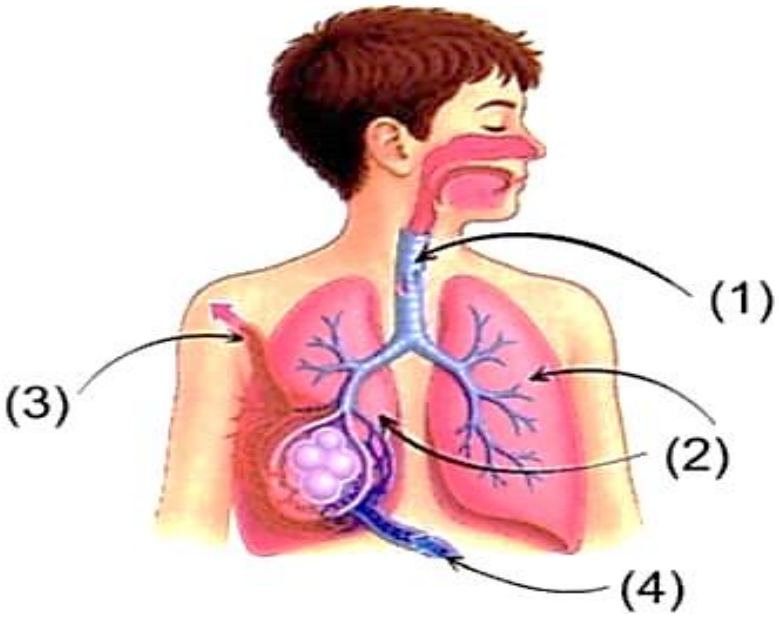
1-Number (1) refers to …….

which works on the passage of air from the nose to the lungs.

2-Number (2) refers to…….

3-Number (3) refers to blood rich in…… gas,

while number (4) refers to blood rich in……..…… gas.



Chapter 3 : Digestion

Put [√] or [×]:

1-The digestive tract begins with the stomach. ( )

2 The small intestine ends with the anus. ( )

3-The path that digested food takes inside the body is called the food pipe. ( )

4- Food passes from the mouth to the stomach through a muscular tube called the small intestine. ( )

5- Saliva breaks down starch in the stomach. ( )

Write the scientific term of each of the following:

1-The organ which beginning of the digestive tract in the human body.

[……]

2- An organ through which feces from the digestion process is comes out from the body. [……]

3- The process of breaking down food and changing it into a form that is easy to absorb [……]

4 The path of food inside the human body, starting from the mouth to the anus.

[……]

What happens if

1-Saliva is not secreted while chewing food inside the mouth.

……..

2-The inner surface of the small intestine becomes completely smooth without villi.

……

3-Undigested food passes from the small intestine into the large intestine

……

Give reasons for:

1-You can feel a sweet taste when keeping a piece of bread in your mouth for a while.

……

2-Water with a temperature about 40 degrees Celsius is used in the starch detection experiment.

……..

3-Iodine solution turns dark blue when placed on a piece of bread

……

4-The liver stores nutrients resulting from food digestion.

……..……..

5- Undigested food becomes solid waste inside the large intestine

……..……..

Complete the following sentences:

1-Food is broken down into small pieces in the mouth by the …….....

2-The digestive tract begins with the …….……and ends with the……..

3-Saliva is present in the …… and starts the digestion of.……

4- We detect the presence of …….……in food using iodine solution.

5-The small bumps on the inner surface of the small intestine are called

……..…

6- Undigested food passes into the……. which absorbs more and ……..…….. leaving solid waste.

Chapter 4: Blood circulation and excretion

Choose the correct answer:

1-The ……is the organ that pumps blood to all body parts.

a)lungs b)heart c)liver d)kidneys

2-The heart sends blood rich in carbon dioxide to the ..

a)lungs. b) small intestine. c)diaphragm. d)stomach.

3- Blood flows inside an integrated network of fine tubes spread in the body called ……

a- blood vessels. b-rhythmic pulses.

c-respiratory gases. d-absorbed nutrients.

Write the scientific term of each Of the following:

1-The fluid that flows inside the blood vessels carrying oxygen, nutrients and waste products. (……..)

2- The organ that works as a pump, sending blood to all body parts.

(……..)

3-The organ responsible for supplying the blood with oxygen and getting rid of carbon dioxide. (……..)

4-The continuous movement of blood inside a network of vessels.

(……..)

5-The system that is responsible for pumping and circulating the blood throughout the body. (……..)

Complete the following sentences:

1-The organ designed for collecting and temporarily storing urine is called the ……

2-The excretory fluid that is collected inside the urinary bladder is called …….....

3-The two kidneys filter the blood and extract……. and …..…….from it.

4-The stomach, small intestine and ……..are abdominal organs.

5-The two …….. are located on the lower back.

Arrange the following to show the correct path of blood [start with lungs):

Heart — blood loaded with carbon dioxide — Body organs — Blood loaded with oxygen — Lungs

……

……

Give reasons for:

1-Heartbeats become faster when running.

….....

2-The heart does not stop beating even during sleep and rest

……..

3-The heart receives blood from all body parts, then sends it to the lungs.

……

4- Urine is formed by the two kidneys.

….....

5-The passage of blood through the two kidneys.

……

What happens?

1-If urine reaches the urinary bladder.

…….

2- If the two ureters are absent from the body.

…….

3-When blood loaded with carbon dioxide reaches the lungs

……..…….……

Chapter 5: Photosynthesis

Write the scientific term of each of the following:

1-The gas that the plant needs to breathe. [……....]

2-The part of green plant that absorbs sunlight. [……....]

3- The process that stops in the green plant at night. [……....]

4- The food formed by the green plant during the photosynthesis process.

[……....]

5- The food which is stored in the green leaves after occurrence of photosynthesis. [……....]

Give reasons for:

1-In the activity of detecting the presence of starch in leaves, the leaves are washed with water after immersing them in ethanol.

……..…….

2 The green plant stores starch in their leaves.

……..……

3 The green plant needs light

…….……

Correct the underlined words:

1- The color of iodine changes to <u>yellow</u> when it reacts with the starch in the leaves.

2- In the activity of detecting starch in the plant's leaf, the plant leaf was put in <u>cold</u> water after removing it from ethanol.

Cross Out the odd word:

1- Carbon dioxide gas — Sunlight — Water — Starch.

2- Sugar — Starch — Oxygen — Carbon dioxide gas.

What happens?

1-When the green plants stop making the photosynthesis process at night.

……..…….……..

2-When exposing a green plant to sunlight.

……..……..……..

3-To the plant in the absence of oxygen gas from air that surrounds the plants.

……..

Chapter 6: Transpiration of water in plants

Put (√) or (X) :

1-Most transpiration in a plant occurs through stomata, which found mostly on lower surface of roots ( )

2-Transpiration is the process by which a plant loses water as water drops to the air. ( )

3-The main path of water inside the plant is from the leaves to roots. ( )

Write the scientific term of each of the following:

1-The process by which a plant loses water as vapor to the air.

[……..]

2-Small pores found mostly on the lower surface of leaves the act as exits for water vapor. [……..……..]

3-The part inside the plant, its veins turn red after putting the plant in colored water. […….……..]

Complete the following sentences:

1-If you water the base of a wilted plant……the plant after a while.

2-From parts which is covered red when putting the plant in colored water are

leaves,…….. and ……..

Give reasons for :

1- Stomata are found in the plant's leaves.

……

2- Plants do not consume all the amount of water which are absorbed from the soil.

……..

3-The plant leaves turn red after placing it in red colored water.

……..…

What happens if

1- If you cover a green plant with a transparent plastic bag and tie it tightly around the stem and leave it in a sunny place for several hours.

……..…….

2-If a wilted plant is watered.

……..……

3-If you leave the plant in red water for a few hours.

.....

Chapter 7: Food Chain

Choose the correct answer from those between brackets:

1-The food chain begins with …… (plants - animals)

2-A…….. gets energy from another living organism. (mouse - plant)

3-Rabbits depend on plants ……..to get energy. (directly - indirectly)

4-Herbivores include ……. (foxes - cows)

Give reasons for:

1-Using arrows in food chain drawings.

……..

2-Sunlight is for both plants and algae.

……

3-The death of grass negatively affects the environment.

……..…….

4-Oxygen does not run out from the atmospheric air despite millions of living organisms breathing it daily.

……..…….

Give an example of each of the following:

1-A carnivore: …….

2-A herbivore:…….

Cross out the odd word:

1-Grasshopper - Rabbits - Lions - Sheep. ……..

2-Snakes - Eagles - Lions - Plants. ……..

3-Lion - Grass - Wheat - Palm trees. ……..

What happens

1-When a grasshopper feeds on plant leaves. (According to Energy transfer)

……

2-When all plants disappear from a food chain.

……..

3-To plants if sunlight does not reach the surface of the Earth.

……

4-When plants stop releasing oxygen gas into the atmosphere

……

Chapter 8: Food chains in Egypt

Put (√) or (X):

1- Grasshoppers and jerboas are examples of herbivores. ( )
2- Nile perch fish feed on tilapia fish in the Nile River food chain. ( )
3- The snake feeds directly on the papyrus plant in the desert. ( )
4- The absence of top carnivores never affects the environmental balance. ( )
5- The fennec fox is a herbivore that makes its own food ( )

Correct the underlined words:

1- Any food chain ends with herbivores.
2- In the Nile River, herbivores fish like the Nile tilapia feed directly on small shrimp.
3- Living organisms located at the highest level in the food chain are called top herbivores.
4- In the desert, organisms that feed on plant seeds are called carnivores.

Write the scientific term of each of the following:

1-A dry Egyptian environment where herbivores animals depend on eating shrubs to survive. […….]

2-A huge reptile animal that represents the top of the aquatic food chain in the Nile River. […….]

3-A type of herbivores Nile fish that feeds directly on algae and aquatic plants.

[…….]

Give reasons for:

1- The Nile Tilapia is considered a herbivore in the aquatic food chain.

……..

2-Jerboas cannot live in an environment that has no shrubs.

……..

What happens

1- If all aquatic plants and algae disappear from the Nile River.

……

2-If Nile Tilapia disappeared from the waters of the Nile River. (Regarding Nile Perch).

……..

Chapter 9: Properties of solutions

Correct the underlined words:

1-The color of the blue litmus paper <u>does not change</u> when carbonated water is added to it. …….

2-<u>Freezing</u> is the change of water from a liquid to a gas by heating.
…….

3-Evaporation is the change of water from a <u>solid</u> to a gas by heating.
…….

4-When mixing carbon dioxide gas with water, we can get <u>ammonia</u> solution.
…….

5-When mixing ammonia gas with water, we can get <u>hydrochloric acid.</u>
…….

Complete the following sentences:

1-Limewater is considered an……..…….. solution, while distilled water is a ……..…. solution.

2-Ammonia solution changes the color of litmus paper from ……. to ……..……

3-Examples of solutions that do not change the color of both litmus paper are ……. and …….

Give reasons for:

1-Ammonia solution changes the color of red litmus paper to blue.

……..…….

2-The effect of carbonated water on the two litmus paper is different from the effect of limewater.

……

3- Red litmus paper is used to detect alkaline solutions.

……..……..

4- Blue litmus paper is used to detect acidic solutions.

……

What is the importance of each of the following?

1-Red litmus paper…….

2-Blue litmus paper……

3-Evaporation of solutions……..

What happens when?

1-Drops of limewater are added to red and blue litmus paper

……..……..

2- Heating salt water until water completely evaporated.

……..……

Chapter 10: Reaction between solutions and metals.

Give reasons for:

1-When a piece of aluminum is placed in dilute hydrochloric acid, gas bubbles are observed.

…….

2-We should not use a strong acidic solution to clean aluminum pots.

…….

Cross out the odd word:

1-Iron — Aluminum — Gold — Plastic. …….

2-Carbon dioxide — Oxygen — Nitrogen — Aluminum. …….

Put (√) or (X):

1-A white powder is formed when aluminum reacts with dilute hydrochloric acid, then the solution is evaporated. ( )

2-When a metal reacts with dilute hydrochloric acid, it produce gas bubbles. ( )

3- When aluminum reacts with hydrochloric acid and the solution is evaporated, a shiny metal remains at the bottom of the container. ( )

Complete the following sentences:

1-Iron,……. , and …….are solid metals.

2- Gas bubbles evolve when iron reacts with dilute …….. acid.

3- When aluminum reacts with hydrochloric acid, and the solution is evaporated, a ……..…… colored powder is formed.

What happens...?

1-When adding dilute hydrochloric acid to a test tube containing a small amount of steel wool.

…….

2-When using a strong acidic solution to clean a cooking pot made of aluminum.

……..……..

Choose the correct answer:

1-Gas bubbles evolve when ……..reacts with hydrochloric acid solution.

A- gold B- iron C-copper D- silver

2-When a metal reacts with dilute hydrochloric acid, it changes into a new substance that differs in

A-color. B- appearance. C-luster. D- all of the above.