

Final Term Exam May 2017

Science Revision Sheet, Grade 6

Choose the best answers:

- 1- Which of the following statements describe the separation technique of precipitation?
- Turn a solid into liquid
 - Heat the given material to a specific temperature
 - Mix two different chemicals together to cause a chemical reaction
 - Lower the temperature of the given material to below freezing point of water

Ans. c

- 2- Which of the following substances sublimates when heated
- Snow
 - Dry ice
 - Naphthalene
 - Soap

Ans. c

- 3- We find it more difficult to climb a mountain than to go down the mountain. What force is helping us as we move down the mountain
- Magnetic force
 - Frictional force
 - Gravitational force
 - Elastic force

Ans. c

- 4- What are two factors that affect friction and movement?
- Temperature and colour of an object
 - Colour of an object and the type of surface
 - Gravitational force and temperature
 - Mass of an object and the type of surface

Ans. d

- 5- What type of simple machine is shown in the picture below?



- a) Gears
- b) Lever
- c) Wheel and axle
- d) Pulley

Ans. b

6- Which part of an aeroplane helps to provide an upthrust?

- a) Tail
- b) Rudders
- c) Wings
- d) Wheels

Ans. c

7- In a hydroelectric power station, the _____ energy of the running water turns the turbines. When the turbines spin, the generator generates electrical energy.

- a) Kinetic
- b) Mechanical
- c) Gravitational potential
- d) Chemical

Ans. a

8- The table below shows the different sources of energy

Sources of energy	
Renewable	Non-renewable
Wind	Oil
X	Y

Which of the following correctly identifies X and Y?

X	Y
a- Sun	Wind
b- Natural gas	Running water
c- Sun	Coal
d- Coal	Petrol

Ans. c

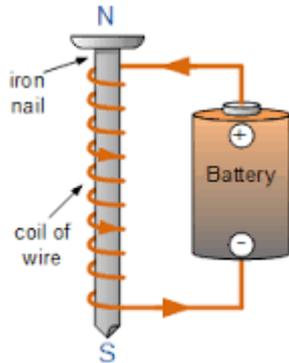
9- Which of the following electrical appliances use(s) electricity to produce heating effects?

- a) Hairdryer
- b) Gas stove

- c) Washing machine
- d) Television set

Ans. A and B

10- What effect of electricity is shown in the diagram below



- a) Metallic
- b) Magnetic
- c) Kinetic
- d) Chemical

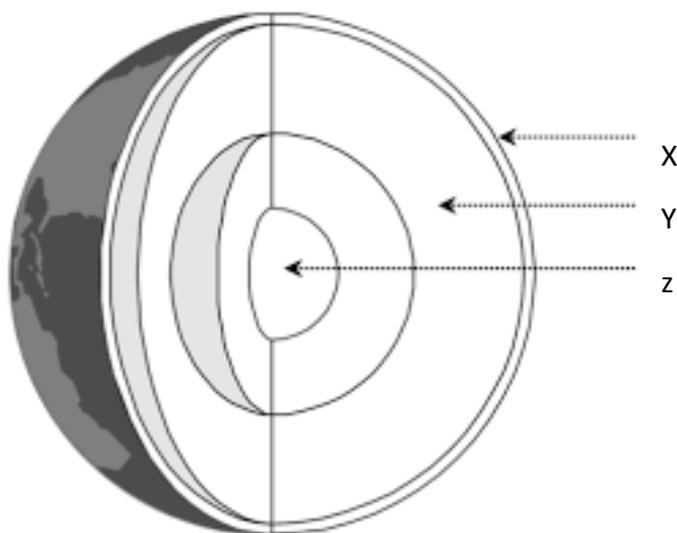
Ans. b

11- Which of the following is an example of a metamorphic rock?

- a) Limestone
- b) Granite
- c) Basalt
- d) Marble

Ans. d

12- The diagram below shows the structure of the Earth



Which of the following correctly identifies X, Y and Z?

X	Y	Z
a- Crust	Mantle	Core
b- Mantle	Core	Crust
c- Core	Crust	Mantle
d- Core	Mantle	Crust

Ans. a

13- Which of the following is **not** an agent of erosion?

- a) Wind
- b) Rain
- c) Sun
- d) Tidal waves

Ans. C

14- Which of the following is a rapid process caused by plate movements?

- a) Earthquakes
- b) Landslides
- c) Frost action
- d) Abrasion

Ans. a

15- Which of the following correctly describe ways to prevent the destruction of the surface of the Earth by erosion?

- a) Do not cut down trees unnecessarily
- b) Grow trees and plants to cover exposed soil
- c) Water soil during hot weather to keep soil damp so as to prevent it from being blown away
- d) All of the above

Ans. d

16- What is the name of the theory that describes the movement of plates on the Earth's surface?

- a) Richter scale
- b) Fault lines
- c) Plate tectonics
- d) Seismic waves

Ans. c

17- A tsunami is a series of extremely large waves. Tsunamis occur when there is a large vertical displacement of water in a particular area in the sea. Which of the following results in this vertical displacement of seawater?

- a) A large scale landslide in the sea
- b) An underwater volcanic eruption

- c) A sudden drop or left of the Earth's crust during an Earthquake
- d) A strong spiral of wind or cyclone that forms over warm water

Ans. c

18- Which of the following statement(s) about the Sun is not correct?

- a) The Sun is at the centre of the Solar System
- b) The Sun is made up of hot gases such as hydrogen and helium
- c) Sunspots are found in the core of the sun
- d) Nuclear fusions occur in the photosphere of the Sun

Ans. c

19- Which of the following correctly describes the planet, Mercury?

- a) It takes 365.25 days to orbit the Sun
- b) It is the coldest planet in the Solar System
- c) It is the closest planet to the Sun
- d) It is used to be called a dwarf planet

Ans. b

20- Which of the following is a terrestrial planet?

- a) Earth
- b) Jupiter
- c) Uranus
- d) Neptune

Ans. a

Answer the following Questions.

1) a) What is freeze-drying?

This is the complete removal of water from food and other materials

b) What is the underlying principle of freeze drying?

Sublimation is the underlying principle in freeze drying

c) Complete the passage below about how freeze-drying is carried out.

The materials are first placed on the **heating shelves**.

The chamber is then sealed and the **compressor** will lower the chamber's

temperature. After the materials are frozen, the vacuum pump is turned on. It forces

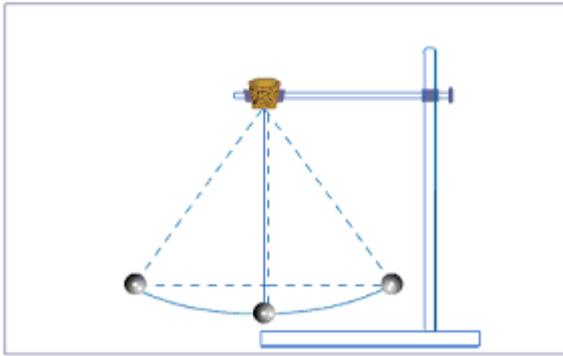
the air out of the chamber, lowering the pressure in it. The **heating shelves** become

slightly hot. Any water left in the frozen materials changes directly into water

vapour. The water vapour changes into ice on the **freezing coil**. The process

continues for several hours until the material is completely dry.

2- The diagram below shows a pendulum.



- a) What does the pendulum consist of?
-a pendulum consist of a metal bob suspended by a string from a fixed support.
- b) What factors affect the motion of a pendulum?
-air resistance and gravitational force

3- Use the words in the box to complete the chart below.

Pencil Sharpener	Pulley	Wheelbarrow	Ramp
Simple machines			
Inclined plane	Wheel and axle	Lever	Pulley
Ramp	Pencil sharpener	wheelbarrow	Block and tackle

4- A) How is energy converted for us to use? Complete the table below.

Form of energy	Source of energy	Converted into	Used for
Light energy	Sun	Solar energy	Heating water
Kinetic energy	Running water	Electrical energy	Generating electricity
Kinetic energy	Wind	Mechanical energy	Grinding grains and food
Chemical energy	Fuels	Heat	Cooking food

- c) What are biofuels?
This is fuel derived immediately from living matter
- d) What are renewable sources of energy? Name three examples.
These are sources of energy that will not run out. (Unlimited)
They include: energy from the sun, running water, wind.

- 5- The formation of the three main types of rocks is interrelated. The rock cycle explains their relationships. What is a rock cycle? Explain your answer.
The continual process of change in rocks. i.e from igneous rocks to sedimentary rocks, to metamorphic rocks back to igneous or sedimentary or metamorphic rocks.
- 6- A) Slow processes and rapid processes in the environment change the Earth's surface. What are slow and rapid processes? Name two examples of slow processes.
Slow processes occur over time. Examples include; erosion and weathering.
Rapid processes only require a very short time for the changes to be observed.
Examples include; landslides, volcanic eruptions, earthquakes

b) Industrialisation can cause significant changes to the surface of the Earth. Name the human activity to match each description in the table below.

Human Activity	Description of its results on the surface of the Earth
Building roads and bridges	Building of bridges across rivers causes the rivers to stop flowing.
mining	Drilling of hills, mountains and other parts of the Earth for metals and fuels greatly change the Earth's surface
logging	Forests are cleared to provide materials for buildings
Factories, power plants and houses	Hills are flattened, swamps are filled and forests are cleared so that land is made available for development

- 7- A) What is a natural disaster?
A natural disaster is a result of a natural occurrence that affects the earth's surface and the surrounding environment
- b) An Earthquake is extremely dangerous. What is its aftershock and how is it also dangerous?
Aftershocks are earthquakes that happen soon after the first one, which can cause more harm as people may think that it is safe after the first earthquake is over
- 8- A) Name the four planets that are known as terrestrial planets
Mercury, Venus, Earth, Mars
- b) Name four planets that are known as gas planets or Jovian planets
Jupiter
Saturn
Uranus
Neptune
- c) Name three objects found in the Solar system.

Sun, planets, moons.

e) What is the recent discovery about Mars?

Scientists have found strong evidence that water once flowed on the surface of Mars. They found gullies and valleys on the planet's surface and think that water may still lie in the cracks of rocks, and vast amounts of ice beneath the surface near its south pole were discovered.

Fill in the blanks with the correct answers

- 1- Sublimation is used in moth balls as insect repellant and in dry ice for keeping food cold.
- 2- Gravity pulls all objects downwards. All objects fall at the same rate, regardless of their mass.
- 3- The point at which the lever is resting is called the fulcrum. There are three types of levers, first class, second class and third class.
- 4- The inclined plane reduces the force applied because the effort moves the load over the greater distance
- 5- We must use energy wisely in order to conserve energy.
- 6- When fuels are burnt, the chemical potential energy in them is converted into heat and light energy.
- 7- Electromagnets are used in electric motors and electric bells
- 8- Molten rocks that cool and solidify above the ground are known as extrusive igneous rocks.
- 9- The three types of rocks are igneous rocks, sedimentary rocks and metamorphic rocks.
- 10- There are many features on the surface of the Earth, including continents, islands oceans, seas, rivers, lakes, mountains, hills, deserts plains, volcanoes and valleys.
- 11- The Earth's surface undergoes reshaping and changes over time due to rain, running water, wind, sunlight and Tidal waves. These are known as agents of erosion and weathering.
- 12- We can find ways to prevent the destruction of the Earth by erosion, landslides, abrasion and floods

- 13- A natural **disaster** is a result from the natural occurrence that affects the Earth's surface and the surrounding environment. It is natural because it occurs without any human involvement.
- 14- Typhoons are dangerous because of their strong winds, violent thunderstorms and heavy rains. They are detected and tracked by satellites, aircrafts and ships with special recording equipment as well as the weather **radars/station**
- 15- We must take precautionary measures when a typhoon is approaching and **evacuate** if told to do so
- 16- An earthquake is measured using the **Richter** scale. Scientists will then decide its **magnitude**
- 17- The **plates tectonics** theory describes the movement of plates on the surface of the Earth in different directions.
- 18- Volcanic eruptions can cause great destruction. **Ash/lava** and very big rocks from a volcanic eruption can cause great damage. **Earth tremors** are a sign that a volcanic eruption is approaching so we need to take precautionary measures to keep ourselves safe.
- 19- The Sun is huge. It is made up of hot gases such as **hydrogen** and **helium**
- 20- Stars seem to move across the sky at night because of the **rotation** of the Earth on its axis
- 21- The **photosphere** has sunspots and solar **flares**
- 22- Planets have different characteristics which include their orbit, **distance** from the Sun, temperature and the **period of revolution** around the sun.