FIRST SEMESTER GENERAL SCIENCE WORKSHEET FOR GRADE 8 MEDIUM LEVEL SCHOOL STUDENTS UNIT ONE: BASICS OF SCIENTIFIC INVESTIGATION

Choose the correct answer from the following four alternatives

1. Which of the following is NOT indigenous measurement?
   - A. Woqet
   - B. Cubit
   - C. Meter
   - D. Kuntal
2. One of the following is length indigenous measurement methods
   - A. Cubit
   - B. Woket
   - C. Shadow
   - D. Ferensula
3. The SI unit of Temperature is
   - A. Degree Celsius
   - B. Degree Fahrenheit
   - C. Kelvin
   - D. Second
4. One of the following is different from the rest
   - A. Pace
   - B. Jog
   - C. Sini
   - D. Birchiko
5. Which of the following is a true statement about measurement?
   - A. Traditional measurement is highly reliable than modern one
   - B. Traditional measurement is not applicable for now a day.
   - C. Measurement is comparing an object with known value
   - D. One quintal measurement is exactly equal to 100kg
6. Which of the following are examples of fundamental physical quantities?
   - A. Length, Mass, Current & Time
   - B. Speed, Volume, meter & kilograms
   - C. Time, Area, Acceleration,& speed
   - D. Force, density, length & Temperature
7. The SI unit of density and speed in respectively
   - A. $Kg.m/s^2$ and m^3
   - B. Kg/m^3 and m/s^2
   - C. Kg/m^3 and m/s
   - D. m/s^2 and kg/m^3
8. The correct writing prefixes for 0.000008m is
   - A. 8µm
   - B. 8mm
   - C. 8Gm
   - D. 8dacm
9. The correct conversion of 0.25 kg into gram is
   - A. 2500gram
   - B. 250gram
   - C. 0.0025gram
   - D. 25gram
10. Which of the following is NOT equal to 0.00017second?
    - A. 0.017 centisecond
    - B. 0.17 millisecond
    - C. 0.0017 decisecond
    - D.17 microsecond

11. 140 minute is ------day?

A. 0.01 day
C. 0.08 days
B. 0.097days
D. 0.18 days

12. 10,000 milli gram is ------kilogram.

A. 0.1kg
C. 0.01kg
B. 0.0001kg
D. 1kg

13. Which of the following is the correct procedure of scientific investigation?

A. Background research, hypothesis, Ask question, Test hypothesis, analyze result and draw conclusion and communicate results
B. Ask question, hypothesis, background research, Test hypothesis, analyze result and draw conclusion and communicate results
C. Ask question, background research, hypothesis, Test hypothesis, analyze result and draw conclusion and communicate results
D. Ask question, Test hypothesis, background research, and hypothesis, analyze result and draw conclusion and communicate results

14. Which one is true about measurement?

A. It is comparing with a standard
B. Indigenous measurement is more reliable than scientific
C. Indigenous measurement is useless
D. All

15. Which one is indigenous measurement of volume?

A. Cubit
C. Arm span
B. Jog
D. Weqet

16. Among the following which one is the fundamental unit

A. Second
C. Cubic meter
B. Square meter
D. Meter per second

17. Which of the following is equal to 0.00017second?

A. 0.017 centisecond
C. A and B
B. 0.17 millisecond
D.17 microsecond

18. 100milli gram is ------kilogram.

A. 0.1kg
C. 0.01kg
B. 0.0001kg
D. 1kg

19. Accuracy refers to

A. How close measurements are to each other
B. How close measurements are to the true value

C. How often one plays dart game

D. Indigenous measurement

20. The next step to “establish your hypothesis” in scientific investigation is

A. Test your hypothesis

B. Ask questions

C. Do background study

D. Communicate

21. Which one is a fundamental physical quantity?

A. Length

B. Density

C. Speed

D. Force

22. In the laboratory a teacher asked 4 of his students to weigh a 1kg object and they measured 3.1kg, 3.12kg, 3.11kg, and 3.09kg. Their measurements are

A. Accurate

B. Precise

C. Not precise but accurate

D. Neither accurate nor precise

23. 120 minute is ------day?

A. 1day

B. 2days

C. 0.08 days

D. 0.18days

FIRST SEMESTER GENERAL SCIENCE WORKSHEET FOR GRADE 8 MEDIUM LEVEL SCHOOL STUDENTS UNIT TWO: COMPOSITION OF MATTER

Choose the correct answer from the following four alternatives

1. The idea that matter consists of discrete indivisible particles called "atoms" was introduced by

   A. Democritus
   C. Wohler
   B. Aristotle
   D. Dalton

2. According to Aristotle matter is

   A. Continuous
   C. Indivisible
   B. Discrete
   D. Both divisible and indivisible

3. The smallest particle of an element that can take part in a chemical reaction is called ----

   A. Atom
   C. Element
   B. Molecule
   D. Electrons

4. Which of the following particle is found outside the nucleus of an atom?

   A. Proton
   C. Neutron
   B. Electron
   D. Nucleus

5. In the following notation of $^{39}_{19}K^{+}$ The number of proton, neutrons and electron in respectively are---

   A. 19,19,20
   C. 39,20,20
   B. B. 19,20,18
   D. 19, 19, 19

6. Which of the following atom that has no neutron in its nucleus?

   A. Hydrogen
   C. Chlorine
   B. Oxygen
   D. Bromine

7. Which of the following sub atomic particles has a positive charge?

   A. Proton
   C. Electron
   B. Neutron
   D. Atom

8. Which of the three sub-atomic particles is the lightest?

   A. The proton
   C. The electron
   B. The neutron
   D. Nucleus

9. Which of the following elements exists as a polyatomic molecule?

   A Carbon
   C Bromine
   B Sulphur
   D Neon

10. All of the following elements can exist as diatomic molecules EXCEPT

    A. Hydrogen B. Oxygen C. Sodium D. Chlorine

11. Which of the following is NOT a molecule of compound?

    A. Water
    C. Sulphur dioxide
    B. Ammonia
    D. Hydrogen

12. The sum of the number of protons and the number of neutrons in the nucleus of an atom is

A. Mass number
B. Atomic number
C. Electron number
D. Valance number

13. The number of protons in the nucleus of an atom of the element is -----

A. Mass number
B. Atomic number
C. Electron number
D. Valance number

14. What is the atomic number of an atom equal to?

A. The number of protons in the nucleus
B. The number of neutrons in the nucleus
C. The number of electrons in the outer most shells
D. The numbers of protons and neutrons in the nucleus

15. The mass number of chlorine is 35 and its atomic number is 17. What is the number of Protons, electrons and neutrons in respectively.

A. 17,18,17
B. 17, 17,17
C. 18, 17,17
D. 17,17,18

FIRST SEMESTER GENERAL SCIENCE WORKSHEET FOR GRADE 8 MEDIUM LEVEL SCHOOL STUDENTS UNIT THREE: CLASSIFICATION OF COMPOUNDS

Choose the correct answer from the following four alternatives

1. Which of the following is a compound?
   A Iron B Alloy C Rock salt D Sugar
2. Which one of the following formula represents an alkane containing ten carbon atoms?
   A $C_{10}H_{10}$ B $C_{10}H_{20}$ **C** $C_{10}H_{22}$ D $C_{10}H_{18}$
3. The correct formula of nonene is:
   A. C_9H_9 B. C_9H_{20} C. C_9H_{18} D. C_9H_{22}
4. All of the following compounds are hydrocarbons except:
   A. ethane C. ethyne
   B. ethene D. ethanol
5. Which one of the following compounds can be used for preserving biological specimens?
   A. Formalin C. Ethanol
   B. Vinegar D. Decane
6. Alkanes, Alkenes and alkynes are the combination of which of the following elements:
   A. Oxygen and Nitrogen C. Nitrogen and Carbons
   B. Hydrogen and Nitrogen D. Carbon and Hydrogen
7. A hydrocarbon in which two carbon atomes are joined by a double bond is called as an:
   A. Alkane C. Alkyne
   B. Alkene D. Ionic bond
8. The molecular formula of propane is
   A. CH_2 C. C_3H_8
   B. C_4H_{10} D. C_2H_6
9. Write the molecular formulas of the following hydrocarbons.
   A. Ethane ---------- F. **Butene** ---------- K. Pentene, ----------
   B. Ethene ---------- G. Butyne ---------- L. Heptane, ----------
   C. Ethyne ---------- H. Hexene ---------- M. Hexyne, ----------
   D. Methane---------- I. Hexane ---------- N. Octene, ----------
   E. Butane ---------- J. Hexyne ---------- O. Nonane ----------
10. Write the formulas of alkanes that contain **three, five, seven, and nine** carbon atoms.
11. Classify each of the following hydrocarbons as alkane, alkene or alkyne.
    A. C_5H_{12} ---------- C. $C_{15}H_{28}$ ---------- E. C_3H_8 ----------
    B. $C_{14}H_{28}$ ---------- D. C_7H_{16} ---------- F. $C_{10}H_{18}$ ----------
12. Classify each of the following compounds as **organic** or **inorganic**.
    A. Animal fat ----------
    B. Sugar ----------
    C. Iron (II) oxide ----------
    D. Carbon dioxide ----------
    E. Vinegar (Aceto) ----------
    F. Vegetable oil ----------
    G. Water ----------
    H. Common salt ----------

13. Write the formula and name of each hydrocarbon described below.

    A. An alkane that contains eight carbon atoms ----------& ----------

    B. An alkane that contains seven carbon atoms ----------& ----------

    C. An alkene that contains nine carbon atoms ----------& ----------

    D. An alkene that contains eight carbon atoms ----------& ----------

    E. An alkyne that contains eight carbon atoms ----------& ----------

    F. An alkyne that contains seven carbon atoms ----------& ----------

14. Name the hydrocarbons or an organic compound described by each of the following.

    A. Bottled gas used as fuel. ----------

    B. Component of fuel for engines.----------

    C. Component of kerosene. ----------

    D. Starting materials for the production of plastics. ----------

    E. A fuel to produce flame used for cutting and welding metals. ----------

    F. A constituent of all alcoholic beverages. ----------

    G. Organic chemical used to preserve biological specimens. ----------

15. A chemical used as food flavoring agent. ----------

16. Classify the following compounds into **oxides**, **acids, bases and salts**.

    A. Citric acid ----------

    B. Sulphur dioxides ----------

    C. Potassium hydroxide ----------

    D. Sodium sulphate ----------

    E. Sodium hydrogen carbonate. ----------

SECOND SEMESTER GENERAL SCIENCES/GS/ WORKSHEET FOR GRADE 8 STUDENTS

UNIT FIVE ECOSYSTEM AND CONSERVATION OF NATURAL RESOURCE

Choose the correct answer from the following four alternatives

1. The sun is made up of hydrogen, helium and other gases, among these components, which one of the following gases contains the highest proportions?
   A. Hydrogen
   B. Helium
   C. Carbon
   D. Nitrogen
2. Animals, plants, natural gases, air etc. are natural resources, from these, which is non-renewable resources?
   A. Plants
   B. Natural gases
   C. Air
   D. Animals
3. Dark, soft, and skin in nutrients, decaying organic matters of plant and animals is ----------
   A. Humus
   B. Texture
   C. Parents
   D. Sandy
4. Soil conservation applied by the following practice except
   A. Afforestation
   B. Deforestation
   C. Reforestation
   D. Terracing
5. Which one of the following causes of acidic rain that releases from factories and vehicles?
   A. Sulphric oxide and Nitrogen oxide
   B. Carbon dioxide and Nitrogen oxide
   C. Sulphric oxide and Carbon monoxide
   D. Nitrogen oxide and methane
6. An area where animal habitats and their surrounding are protected from any sort of disturbance is
   A. Sanctuaries
   B. National park
   C. Germplasm
   D. Seed bank
7. ----------is worldwide blockage or reduction of sunlight from reaching the earth's surface as a result of unborn hydrocarbon released into the air.
   A. Global dimming
   B. Global warming
   C. Acid rain
   D. Climate change
8. The raising of temperature on the surface of the earth as result of accumulation of greenhouse gas like carbon dioxide is ----------
   A. Acid rain
   B. Climate change
   C. Global dimming
   D. Global warming
9. A natural processes that warms the earth surface is called ----------
   A. Greenhouse
   B. Harenna
   C. Transpiration
   D. Deforestation
10. The collection of water in the channel and prevent erosion that help increase the crop yield is called ---
    A. Terracing
    B. Contour ploughing
    C. Mon culturing
    D. Deforestation
11. The intermediate soil its water holding properties
    A. Silt
    B. Loam
    C. Sand
    D. Clay

SECOND SEMESTER GENERAL SCIENCES/GS/ WORKSHEET FOR GRADE 8 STUDENTS
UNIT SIX THE SOLAR SYSTEM

Choose the correct answer from the following four alternatives

1. Which of the following planets is taking shortest time to make one complete revolution around the sun?
   A. Mercury
   B. Venus
   C. Earth
   D. Mars
2. Which one of the following is rocky planet?
   A. Mercury, Uranus, Venus and Earth
   B. Mars, Earth, Neptune, and Mercury
   C. Mercury, Venus, earth, and mars
   D. Jupiter, Saturn, Uranus and Neptune
3. Which of the following planets is supporting diversity of life on its surface?
   A. Mars
   B. Jupiter
   C. Earth
   D. Venus
4. Which of the following is the correct ascending order of planets from the sun?
   A. Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus and Neptune
   B. Mercury, Venus, Earth, Mars, Saturn, Jupiter, Uranus and Neptune
   C. Mercury, Mars, Earth, Venus, Jupiter, Saturn, Uranus and Neptune
   D. Neptune , Uranus, Saturn, Jupiter, Mars, Earth, Venus and Mercury
5. Which one of the following are known as true planets in our solar system?
   A. Mercury, Mars And Eris
   B. Pluto, Eris And Mars
   C. Pluto, Eris And Ceres
   D. Ceres, Eris And Earth
6. One of the following is **NOT** dwarf planet in our solar system
   A. Makemake
   B. Haumea
   C. Ceres
   D. Uranus
7. The outer planes are very different from the four inner planets because they have--------
   A. High mass
   B. Low mass
   C. High density
   D. Metallic cores
8. Which one of the following is known as red planet?
   A. Mercury
   B. Venus
   C. Mars
   D. Saturn
9. Among the member of our solar system which planets are rotate from East to West?
   A. Venus and Mars
   B. Mars and Mercury
   C. Uranus and Venus
   D. Neptune and Uranus
10. The icy and dusty objects that revolve around the sun in highly elliptical orbits are called -----
    A. Comets
    B. Asteroids
    C. Meteors
    D. Stars
11. Which one of the following members of solar system are commonly known as shooting stars?
    A. Meteors
    B. Asteroids
    C. Comets
    D. Mars
12. Our solar system is composed of ---------- and ----------
    A. Cloud dust and gases
    B. Rock and cloud
    C. Gases and water
    D. Cloud and stars
13. All planets are rotating at the same direction from west to east **except**
    A. Mercury and Venus
    B. Venus and Uranus
    C. Earth and Jupiter
    D. Uranus and Neptune

14. Which of the following planets are containing small and large number of moons in respectively?
    A. Earth and Saturn
    C. Mercury and Mars
    B. Saturn and Jupiter
    D. Saturn and Earth
15. Which one of the following one is **NOT** true planet?
    A. Mercury
    C. Earth
    B. Venus
    D. Pluto
16. The largest and the most massive object in our solar system that make up of 98% of the total mass of the solar system is called ---------
    A. Jupiter
    C. Pluto
    B. Sun
    D. Neptune
17. Next to the sun, which one of the following are the largest objects in the solar system?
    A. Comets
    C. Planets
    B. Moons
    D. Asteroids
18. Planets are celestial bodies that revolve around the sun in a well-defined path is called--------
    A. Orbit
    C. Path
    B. Belt
    D. Meteors
19. Our planet Earth is found between ----------& ----------
    A. Venus & Mars
    C. Jupiter & Mars
    B. Mercury & Venus
    D. Neptune & Mars
20. Mars has the deepest & longest valley in the solar system known as --------
    A. Valley marineris
    C. Valley breeze
    B. Valley mountains
    D. Valley trains
21. Which one of the following planet has the largest volcanoes in our solar system?
    A. Mars
    C. Earth
    B. Venus
    D. Jupiter
22. Which one of the following planets is contains the largest number of moons?
    A. Saturn
    C. Uranus
    B. Earth
    D. Jupiter
23. The largest planet of the solar system is called---------
    A. Jupiter
    C. Uranus
    B. Saturn
    D. Earth
24. Which one of the following planet is known for its rings?
    A. Saturn
    C. Jupiter
    B. Uranus
    D. Mars
25. Which one of the following planet is the least dense among all the planets?
    A. Jupiter
    C. Uranus
    B. Saturn
    D. Neptune
26. The planet discovered using a telescope & it can be seen only with the help of large telescope is ---
    A. Neptune
    C. Saturn
    B. Uranus
    D. Mars
27. The farthest planet from the sun in the solar system is called ----------
    A. Jupiter
    C. Neptune
    B. Earth
    D. Mercury
28. The fourth largest planet by diameter, the third most massive planet & the coldest is known as --------
    A. Mercury B. Earth C. Venus D. Neptune

29. Which one of the following is **TRUE** about comets in our solar system?
    A. They appears a bright head & with a long tail
    B. They are large number small objects
    C. They are found in the asteroid belt
    D. They are closets to the sun
30. Which one of the following is **FALSE** about Asteroids?
    A. The tail is always directed away from the sun
    B. They are mainly metallic objects
    C. They can only be seen though telescope
    D. They are closet to the sun
31. Most asteroids are found in the asteroid belt, which lies between the orbits of -------&---------
    A. Mars & Jupiter
    B. Mars & Uranus
    C. Jupiter & Neptune
    D. Neptune & Jupiter
32. Which planet tends to have the shortest time to taken to make one complete revolution around the sun?
    A. Jupiter
    B. Mercury
    C. Venus
    D. Earth
33. Which one of the following planets rotates fastest around its own axis of rotation?
    A. Mercury B. Jupiter C. Earth D. Venus
34. The only planet in our solar system that is known to support life is-------
    A. Earth B. Mars C. Jupiter D. Saturn
35. Which planet is the smallest in size?
    A. Mercury B. Jupiter C. Mars D. Saturn
36. Which one of the following is the second largest planet next to Jupiter?
    A. Mercury B. Saturn C. Uranus D. Earth
37. Which one of the correct, the correct order of planets smaller to large size?
    A. Neptune, Uranus, Saturn &Jupiter
    B. Jupiter, Saturn, Uranus & Neptune
    C. Earth, Jupiter, Uranus & Saturn
    D. Earth, Venus, Mars & Mercury

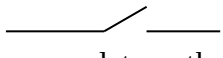
SECOND SEMESTER GENERAL SCIENCES/GS/ WORKSHEET FOR GRADE 8 STUDENTS

UNIT SEVEN PHYSICAL PHENOMENA IN THE SURROUNDING

Choose the correct answer from the following four alternatives

1. Which one of the following is NOT luminous objects?
   A. Light B. Sun C. Bulbs D. Stars
2. When light is reflected from a rough, unpolished surface is known as
   A. Regular reflection
   B. Specular reflection
   C. Diffuse reflection
   D. Dispersion of light
3. A phenomenon in which there is a bending of light rays at it travels from one medium to another is ----
   A. Refraction B. Reflection C. Incident rays D. Dispersion
4. The splitting of white light in to its constituent colors is called ----------
   A. Dispersion B. Reflection C. Refraction D. Rainbow
5. ----------is reflection, refraction & dispersion of light in water droplets.
   A. Rainbow
   B. Refraction of light
   C. Spectrum
   D. Prism
6. All of the followings are the characteristics of the image formed by a plane mirror **EXEPT**
   A. The image is virtual and erect
   B. The image is of the same size as that that of the object
   C. The image is the laterally inverted
   D. The image is laterally erect
7. Materials that allow light to pass thought them completely is known as --------
   A. Transparent B. Translucent C. Opaque D. Oiled paper
8. Which of the following is an example of transparent material?
   A. Metal sheet B. Wood sheet C. Wall D. Glass
9. Objects that allow light pass though partially transmits some amount of light are called-------
   A. Translucent
   B. Opaque
   C. Transparent
   D. Solid objects
10. Which of the following is not an example of translucent material?
    A. Oiled paper
    B. Waxed paper
    C. Frosted glass
    D. Card-board
11. Which of the following materials that do not allow completely blocks light to pass through them?
    A. Opaque material
    B. Translucent material
    C. Transparent material
    D. Frosted glass material
12. Which one of the following is an example of opaque material?
    A. Stone
    B. Air
    C. Waxed paper
    D. Clear plastic
13. The presence of excessive or unwanted sound in the environment is called-------
    A. Environmental pollution
    B. Sound pollution
    C. Air pollution
    D. Light pollution
14. The sound produced in air normal conversation in average decibels is-----
    A. 30Db B. 40dB C. 60dB D. 80dB
15. A repeated sound that is caused by the reflection of sound waves from a surface known as ------
    A. Echo B. Reflection C. Refraction D. Dispersion
16. The mode of transfer of heat from hotter part of a material to its colder part with successive particle collision is called --------

A. Conduction B. Convection C. Radiation D. Opaque

17. The mode of transfer of heat from the hotter part of a fluid or gas to its colder parts by the movement at the liquid or gas is called-------
    A. Convection B. Conduction C. Radiation D. Conductors
18. The transfer of heat from a body at high temperature to a body at a lower temperature without any material medium between them is called----------
    A. Radiation B. Convection C. Conduction D. Insulator
19. Any material that do not allow heat energy to be pass through them are called-------
    A. Insulator B. Conductor C. Convection D. Radiation
20. Substances that allow heat energy to be passed through them are called----------
    A. Conductors B. Insulator C. Radiation D. Conduction
21. Which one of the following is the transfer heat by all solid contact objects?
    A. Insulator B. Radiation C. Conduction D. Convection
22. Any device in the circuit that produces light or heat, when current is flowing though it is called------
    A. Bulb B. Resister C. Switch D. Fuse
23. Which one of the following is show the correct symbol of switch?
    A.  B. 

    C. 

    D. 
24. The complete path electric cell though the bulb and back to the other terminal of the electric cell is called--------
    A. Circuit B. Wires C. Switch D. Battery
25. The branch of physics which deals with the property of a magnet is called ----------
    A. Magnetism C. Electric filed
    B. Magnetic materials D. Electrophilic
26. Which one of the following is the first discovered natural magnet?
    A. Bar magnet C. Disc magnet
    B. Lode stone D. Horseshoe magnet