KEY SHEET for SUMMATIVE ASSESSMENT-3

Class :- VIII **PHYSICAL SCIENCE**

SECTION-I

1. State government decided to avoid flexi banners. Predict the effect of Flexi banners on environment?

Flexi banners are not bio-degradable and they cause cancer and infertility.

2. Friction produces heat. Suggest an activity to prove this?

When we rub both of our hands heat energy produced by the friction.

3. Why we called venus as morning or evening star?

Based on its distance from Earth, Venus appears first in the evening and stays last in the Morning to shine as a star in the sky.

4. It is necessary to save the energy resources like petrolium and natural gas. Write a slogans about this to create awareness among the people?

Slogans:-

1. The less you burn, the more you earn.
2. Save the fuel for next generation.
3. Stay cool and save fuel.
4. Don't be cruel, conserve your fuel.

SECTION-II

5. Write two differences between electric conductors and insulators?

Electric conductors	Insulators
1. Material which allow the electric current to pass through it.	1. Material which do not allow electric current.
2. They are making for electrical wires and conductors.	2. They used in insulation in electrical cables or conductor.

6. Which is the nearest star to the earth? Name any two planets revolving around the star?

1. The Sun is the nearest star to the Earth.
2. Mercury, venus, Earth, Mars, Jupiter, Saturn, Uranus and Neptune are the planets revolving around the sun.

7. Explain the process of formation of petroleum in the earth?

Formation of Petroleum:- 1. Petroleum was formed from the remains of tiny organisms called plankton.

2. As these organisms died, their bodies settled at the bottom of the see or ocean and got covered with layers of sand and clay.
3. Over millions of years, due to absence of air, high temperature and high pressure these deadly organisms transformed into petroleum and natural gas.

8. If there is no friction force, assume the consequences in your class room. Write any four of them?

1. If there is no friction, we cannot hold the objects.
2. We feel difficulty in walking.
3. We are unable to drink and eat.
4. The vehicles are uncontrolled during the journey.

9. Write any four uses of metals in different situations?

1. Many machines and automobiles are made of metals extensively.
2. They are used in building construction.
3. Metals are available as micro-elements in our body.
4. Metals like Gold, silver, platinum, copper are widely used in jewelry.

SECTION-III

10. Objects change due to their state of motion due to the net force acting on them. Do you agree with the sttement? Explain with the examples?

Yes I agree with this statenment.

Examples-1:- 1. A football on the ground is in rest position.

2. When we exert a force (kick the ball) by foot it moves in forward direction from rest position.

Example-2:- 1. When the bus is in moving position, we apply a net force(Breaks on the vehicle) the bus comes to stop.

Example-3:- A cricketer uses force to change the direction of an incoming ball.

Example-4:- A goalkeeper in foot ball applies force to stop an incoming ball.

(OR) Explain the identification of pitch or shrillness of sound with the help of an activity?

Aim: Identifying pitch or shrillness of a sound.

Material required:- A wooden table, two hack-saw blades or metal scales of 30cm length and a brick.

Procedure:- 1. Place the first blade/scale on the table, with 10cm portion of the blade on the table and rest of it in air.

2. Keep brick as weight on the 10 cm portion of the blade/scale kept on table.
3. Place the second blade/scale on the table (see that the gap between these two blades is 10cms), with 25cm on the table and 5cm in air.
4. Keep brick as weight on the scale/blade kept on the table.
5. Vibrate both blades with same force.
6. Observe the vibrations and listen to the sounds produced.

Observations:- 1. You would notice that the number of vibrations produced are less in 20cm long blade when compared to the vibrations of 5cm long blade.

2. The sound produced by 5cm blade is more shrill when compared to that of 20cm blade.

Result:-1. The shrillness of a sound is known as pitch.

2. The number vibrations per second (vib/sec) is called frequency.

11. Observe the following table?

Substance	Is it thermo plastic? Yes or No	Can be recycled Yes or No
P.E.T	Yes	Yes
Bakelite	No	No
Polythene	Yes	No
PVC	Yes	No

Answer the following questions?

i. P.E.T is not used for the cooker handles. Why?

ii. Which substance is used to manufacture electrices switches? Why?

iii. Which is the thermo plastic that can not be recycled?

iv. Why we have to ban the polythene covers?

i. P.E.T is easily melt and caused burning while heating. So, it is not safe to make cooker handles.

ii. Bakelite is used for making electrical appliances including switch boards due to its poor conductivity of heat and electricity.

iii. Bakelite.

iv. Plastic bag(polyrthene covers) pollute our land and water and also harmful to health. So we ban the polythene covers.

(OR)

The following table shows the total power shortage percentage in India from 1994-1997. Observe the data and answer the following qestions?

S.No	Year	Shortage %
1	1994	7.4
2	1995	7.1
3	1996	9.2
4	1997	11.5

i). In which year the shortage percentage of power is least? i. 1995

ii). Between which two years the shortage percentage difference is more? ii. 1995 and 1996.

iii). In which year the shortage percentage is of power is maximum? iii. 1997.

iv). Make a comment on shortage percentage of power between 1994-95?

iv. The shortage percentage difference in the year 1994-1995 is 0.3 percentage.

12. Explain a procedure to do the experiment that magnesium ribbon allows the flow of current?

(OR)

How can you perform the activity to prove that Oxygen is essential for burning? Explain?

Aim: To prove that oxygen helps in burning

Material required: Test tube, test tube holder, spirit lamp, match box, boom stick(agarbatti), potassium permanganate ($KMnO_4$)

Procedure:- 1. Light a scented / incense stick (*agarbatti*), and let it burn for 10 s, then put out the flame and keep it aside.

2. Take KMnO4 in a test tube. Hold the test tube with a test tube holder and heat it over the flame of spirit lamp.

3. Oxygen is released on heating of KMnO4.

$$2KMnO_4 \rightarrow K_2MnO_4 + MnO_2 + O_2\uparrow$$

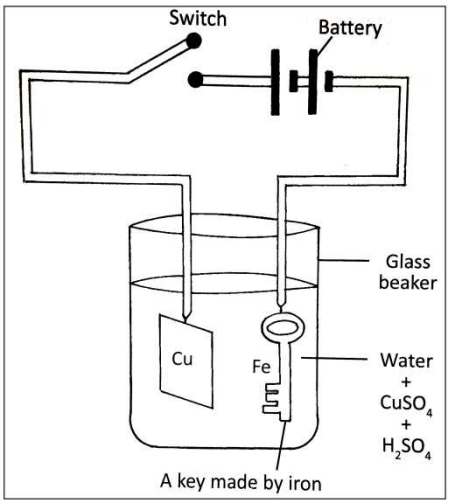
4. Insert the agarbatti with the burning stub, in to the test tube as shown in the figure.

Observations:- 1. You observe that stick burns with a flame.

2. Here the oxygen supports combustion by helping Agarbathi to burn with bright flame.

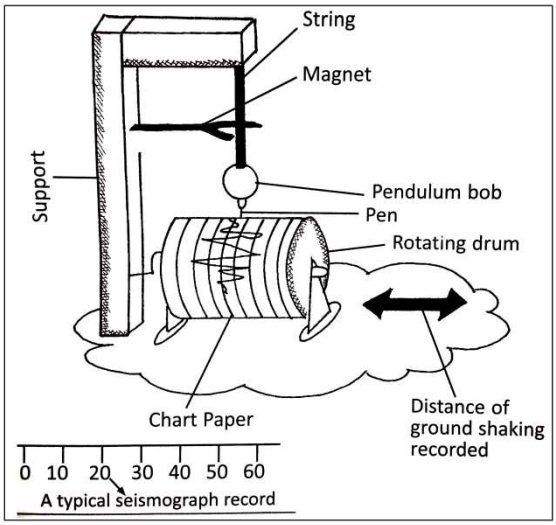
13. Name the process of coatins a metal on another metal. Draw a neat diagram related to this process and labelled the parts?

Coating an iron key with copper by electroplating method.



(OR)

Draw a neat diagram of the instrumet used to measure the intensity of earth quake. name the scale used in this instrument?



SECTION-IV

S.No	Ans	S.No	Ans	S.No	Ans	S.No	Ans
14	A	19	B	24	C	29	C
15	D	20	B	25	C	30	A
16	B	21	B	26	A	31	D
17	A	22	B	27	B	32	A
18	A	23	D	28	A	33	B