I. Choose the right answer
   a) The microorganism that helps in the preparation of curd
      i) yeast  ii) lactobacillus  iii) Rhizobium  iv) streptococcus
   b) Which one of the following is an antibiotic?
      i) Sodium bicarbonate  ii) Streptomycin  iii) Sodium metabisulphite  iv) yeast
   c) The bread dough rises because of
      i) heat  ii) grinding  iii) growth of yeast cells  iv) kneading
   d) Disease causing microorganisms are called
      i) bacteria  ii) virus  iii) microbes  iv) pathogens
   e) Citrus canker is transmitted by
      i) air  ii) insect  iii) water  iv) food

II. Name the following
   i) Tiny living organisms that cannot be seen by naked eye.
   ii) A method of preservation of milk.
   iii) The scientist who discovered penicillin
   iv) The process of conversion of sugar into alcohol.
   v) Dead or weakened microbes introduced into the healthy body.
   vi) Medicines made from microorganisms to kill or stop the growth of other microorganisms.
   vii) A nitrogen fixing bacteria.
   viii) Chemicals used to prevent spoilage of food.
   ix) Carrier of parasite of malaria.
   x) The pathogen that causes tuberculosis.

III. Match the following
   1. Tuberculosis  protozoa
   2. Dysentery  virus
   3. Polio  antibodies
   4. Rust of Wheat  fungus
   5. Vaccine  bacteria
IV. Fill in the blanks.
1. __________ can reproduce only inside the cells of the host organism.
2. ________ reproduces rapidly and produces carbon dioxide during respiration.
3. Streptomycin and tetracycline are examples of ____________
4. When a disease carrying organism enters our body, the body produces ______ to fight the invader.
5. _________ discovered the vaccine for smallpox.
6. ____________ is the carrier of dengue virus.
7. The causative micro organism of Malaria is ____________.
8. Blue green algae and Rhizobium are examples of ____________.
9. Microorganisms fix ____________ to increase soil fertility.
10. Sodium benzoate and sodium metabisulphite are examples of ____________.

V. Define:- Microorganisms, fermentation, pasteurization, vaccine, antibiotics, antibodies, preservatives, food preservation, food poisoning, carrier, communicable diseases, nitrogen fixation, biological nitrogen fixers.

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INTERNATIONAL INDIAN SCHOOL – DAMMAM

CLASS VIII  L-15 SOME NATURAL PHENOMENA (WORK SHEET)  

(2015 - 2016)

Choose the right answer

Q1: Which device is used to protect building from lightning?
(a) Seismograph  
(b) Lightning Conductor  
(c) Barometer  
(d) Thermal Conductor

Q2: Two objects with like charges will
(a) attract each other  
(b) repel each other  
(c) either attract or repel  
(d) neither attract nor repel

Q3: The charge acquired by a glass rod when it is rubbed with silk is considered as
(a) neutral  
(b) either positive or negative  
(c) positive  
(d) negative

Q4: The uppermost layer of the earth is:
(a) Mantle  
(b) Inner core  
(c) Outer core  
(d) Crust

Q5: Earthquake can cause:
(a) Floods  
(b) Landslides  
(c) Tsunami  
(d) All the above

Q6: Electric charge can flow through:
(a) insulators  
(b) conductors  
(c) both a and b  
(d) none of these

Fill in the blanks:

1. The process of transferring of charge from a charged object to the earth is called
2. The electrical charges produced by rubbing are called charges.
3. Unlike charges each other.
4. ________________ is caused by accumulation of charges in the clouds.
5. ________________ is the instrument used for recording seismic waves.
6. During lightning a ________________ phone can be used.
7. Charges in motion constitute an ________________________
8. The boundaries of the earth's plates where earthquakes tend to occur are known as ____________
9. Highly destructive earthquakes have magnitudes greater than ____________
10. An earthquake of magnitude 6 has ____________ times more destructive energy than an earthquake of magnitude 4.

Name the following

1. A device used to detect electric charges.
2. Two most devastating earthquakes which occurred in India.
3. The three layers of the earth
4. The boundaries of the earth's plates where earthquake is more likely to occur
5. The scientist who proved the cause of lightning.
6. An instrument used to measure seismic waves

Answer the following questions

1. Name the earthquake prone areas in India
2. How are tremors on the earth caused?
3. We can easily charge non-metals like rubber, woollen clothes, plastics, etc. whereas we cannot charge a Copper rod easily. why?
4. Name the three layers of the earth.
5. Write the do's and don'ts during a thunderstorm.
I. Name the following
1. Two substances which are good conductors of electricity.
2. Two devices which can detect weak electric current.
3. Three substances which when dissolved in distilled water make it a good conductor of electricity.
4. The British chemist, who discovered the electrolysis of water.
5. The gas formed on the positive electrode during electrolysis of water.

II. Fill in the blanks:
1. Most of the liquids that conduct electricity are solutions of ________, ________, and ________.
2. A coating of Zinc is deposited on iron, while making bridges to protect it from ________ and ________.
3. For making gold plated ornaments gold is connected to the ________ terminal of the battery.
4. Distilled water is free of ________ and is a poor conductor of electricity.
5. The filament of a bulb get red hot and it glows when electric current passes through it due to the __________ effect of electric current.

III. Match the Following:

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) LED</td>
<td>a) does not corrode</td>
</tr>
<tr>
<td>2) Chromium</td>
<td>b) weak electric current</td>
</tr>
<tr>
<td>3) Carbon rods</td>
<td>c) Insulator</td>
</tr>
<tr>
<td>4) Compass</td>
<td>d) Traffic signal lights</td>
</tr>
<tr>
<td>5) Wood</td>
<td>e) Electrolysis of water</td>
</tr>
</tbody>
</table>

IV. Choose the correct answer:
1. Chromium is widely used in electroplating in industry because;
   a) It has shining appearance       b) It does not corrode
   c) It resists scratches           d) All the above properties

2. Tin cans are used for storing food because
   a) Tin is less reactive than iron   b) Iron is less reactive than tin
   c) Iron will not corrode           d) Tin will corrode fast

3. If you want to get a coating of copper on carbon rod, copper is connected to the ________ terminal of the battery.
   a) positive                        b) negative
   c) either positive or negative     d) none of these
4. LED bulbs are used in lighting because;
   a) It consume less electricity  
   b) It has longer life time  
   c) Both a & b  
   d) None of the above

5. Sea water is an example of
   a) Insulator  
   b) good conductor  
   c) both a & b  
   d) none of these

6. During electrolysis of water, bubbles of ________________
   a) O₂ gas is produced  
   b) H₂ gas is produced  
   b) c) both a & b are produced  
   d) none of these

7. During purification of copper, a thick rod of impure copper is connected to the ____________ terminal of the battery
   a) positive  
   b) negative  
   c) either positive or negative  
   d) none of these

V. Write True or False, if False correct the statement
1. Distilled water is a good conductor of electricity.
2. Electrolysis is the process of depositing a layer of any desired metal by means of electricity.
3. Electroplating is one of the most common applications of magnetic effect.
4. In a circuit, the longer lead of LED always connected to the negative terminal of the battery.
5. Common salt is added to the water during electrolysis to make it a poor conductor of electricity.

VI. Answer the followings:
1. Define:  a) Tester  
   b) LED  
   c) electrolysis of water
2. Differentiate between conductors and Insulators with examples.
3. Give Reason:
   a) We should never handle electrical appliances with wet hands or while standing on a wet floor.
   b) Zinc is deposited over iron when constructing bridges.
4. What is electroplating? Draw a simple electric circuit showing electroplating.
5. Write any 3 applications of electroplating.
6. List some chemical effects of electric current.
7. Classify the following as good conductor and poor conductor of electricity
   a) Lemon juice  
   b) Rubber  
   c) distilled water  
   d) sea water  
   e) wood  
   f) Hydrochloric Acid
LESSON-11 FORCE AND PRESSURE

I: CHOOSE THE CORRECT ANSWER:

1. A force has__________________________
   (a) Magnitude only
   (b) Direction only
   (c) Both a and b
   (d) None

2. Which of these is a contact force?
   (a) Frictional force
   (b) Magnetic force
   (c) Gravitational force
   (d) Electrostatic force

3. Which of these can a force acting on an object not change?
   (a) Direction of motion
   (b) State of rest
   (c) Shape
   (d) Mass

4. The force which is exerted by all matter on all other matter is ________________________
   (a) Frictional force
   (b) Magnetic force
   (c) Gravitational force
   (d) Electrostatic force

5. Pressure is defined as _______________________
   (a) Force
   (b) Force x Mass
   (c) Force x Area
   (d) Force per unit area

6. Tyres of heavy vehicles are broad so that____________________
   (a) friction with the ground increases
   (b) pressure on the ground increases
   (c) friction with the ground decreases
   (d) pressure on the ground decreases

7. Pressure exerted by a liquid
   (a) Does not change with depth
   (b) decreases with depth
   (c) increases with the increase in depth
   (d) is different in different direction at same depth.
II-FILL IN THE BLANKS:

1. Two objects must ______________________ for a force to come into play.

2. If a force applied is in the direction of its motion, the speed of the object ______________________

3. When an object is in rest position, its speed is ______________________

4. The force which slows down objects or prevents them from moving is ______________________

5. The envelope of air which surrounds the earth is ______________________

6. A rubber sucker gets stuck to a smooth surface due to ______________________

7. Expansion and contraction of muscles during respiratory process is an e.g for ______________________ force.

III-CORRECT THE FOLLOWING STATEMENTS:

1. When we lift a bucket of water, we use gravitational force.

2. If the area of contact is more, effect of force is greater.

3. Atmospheric pressure increases with height.

4. Drinking straw, dropper, syringe etc make use of the fact that air has weight.

IV-GIVE REASONS:

1. Why is it difficult to cut a potato with a blunt knife and easy to cut with a sharp one.

2. Why do some people suffer from nosebleeds at high altitudes?

3. In a tug-of-war match, if two teams apply equal force the rope will not move.

V-MATCH THE FOLLOWING:

1. Electrostatic force____________________________ depth

2. Force Contact force

3. Pressure Non-contact force

4. Muscular force Direction

VI-NAMES THE FORCE BEHIND THE ACTIONS GIVEN BELOW:

1. Attracts small bits of paper towards a plastic scale rubbed against dry hair.

2. It keeps the moon revolving around the sun.

3. Ripe mangoes from a mango tree fall downwards.

4. A large magnet is being used to pick out scraps of iron from the garbage.

5. Blood gets pushed into the arteries.
I. Name the following:
1) The force which opposes relative motion is
2) The device used to measure the force acting on an object is
3) The substances which reduces friction are
4) The resistance to friction when a body rolls over the surface of another body is
5) The frictional force exerted by fluids is
6) Name the type of friction in the following
   a) Rolling of suitcase fitted with wheels  b) Moving of a heavy box from rest

Fill in the blanks:
1) Friction is caused by -------- of irregularities in the two surfaces.
2) Sliding friction is -------- than static friction
3) Friction can also produce --------.
4) The treaded tyres of cars, truck etc. provides better -------- with the ground
5) --------, -------- & -------- are applied to moving parts of a machine to reduce friction and increase efficiency.
6) Fluid friction can be reduced by giving -------- to bodies.

III. State the following: true (T) or false (F). If false correct the statement:
1) Rough surface has less irregularities
2) The force of friction decreases if both the surfaces are pressed harder
3) The force required to move the object from rest in sliding friction
4) Brake pads in the brake system of bicycles and automobiles increase friction
5) Sliding friction is smaller than the rolling friction

IV. Match the following:
1) Birds -------- measure of force acting on an object
2) Spring balance -------- sliding friction
3) Moving object ------- lubricants
4) Reduces friction -------- fluid friction
V. Multiple choice questions

1) Static friction comes to play when the object is:
   a - rolling    b - sliding    c - moves from rest    d - none

2) Rolling friction comes to play when the object is:
   a - rolling    b - sliding    c - comes to rest    d - all of these

3) In many machines friction is reduced by using:
   a - ball bearing    b - lubricants    c - both a & b    d - none

4) Four children were asked to arrange forces due to rolling, static and sliding friction in a decreasing order their arrangements are given below. Choose the correct arrangement.
   a - rolling static sliding    b - rolling sliding static    c - static sliding rolling    d - sliding static rolling

5) A ball is rolling in north direction, in which direction does the frictional force act?
   a - North    b - South    c - East    d - West

VI. Answer the following:

1) Define 1) Friction 2) Lubricants.

2) Differentiate between static friction and sliding friction.

3) Give reason 1) Why the soles of our shoes are grooved.
   2) Why ball bearings are used in machines

4) How can we increase friction?

5) Explain why objects moving in fluids must have streamlined shape.
INTERNATIONAL INDIAN SCHOOL-DAMMAM
STDVIII CHAPTER 6 COMBUSTION AND FLAME (WORKSHEET 2015-16)

1. CHOOSE THE CORRECT ANSWER.
   1. Combustion is a _______ process.
   [physical, chemical, rapid]

   2. For fires, involving petrol _______ is the best extinguisher.
   [water, oil, carbondioxide]

   3. _______ is the supporter of combustion.
   [sulphur, oxygen, nitrogen]

   4. Sodium bicarbonate give off _______ near the fire.
   [sulphurdioxide, water, carbondioxide]

   5. An ideal fuel has _______ calorific value.
   [high, low, medium]

   6. Burning of match stick is an example _______ combustion.
   [rapid, spontaneous, incomplete]

   [carbonmonoxide, carbonate, nitrogen oxide]

   8. _______ burns in air at room temperature.
   [Aluminium, iron, phosphorous]

II. FILL IN THE BLANKS:
   1. Coal burns in air to produce _______ and _______.

   2. The process of burning of a substance to liberate heat and light is _______.

   3. In the sun, heat and light are produced by _______ reaction.

   4. A substance has to be heated up to _______ to catch fire.

   5. The substance which _______ during burning give flames.

   6. The _______ part of the flame is the hottest part.

   7. The calorific value is expressed in _______.

   8. The unburnt particles on inhaling cause _______.

   9. Burning of coal and diesel releases _______.

   (Unreadable text on the page)}
10. __________ can be stored at high pressure as a liquid in cylinders.

11. Fuel efficiency is expressed in terms of its __________.

12. Magnesium burns to produce __________.

13. Combustion is a __________ process where the substance reacts with __________.

14. The ignition temperature of kerosene oil is __________ than wood.

III. MATCH THE FOLLOWING:

1. Rapid combustion  Corrosive gas
2. Spontaneous combustion  Fire crackers
3. Explosion  Carbon monoxide
4. Sulphur dioxide  Coal mines
5. Incomplete combustion  Temperature
6. Global warming  phosphorous

IV. DEFINE;

V. GIVE REASONS
1. The use of diesel and petrol in automobiles is replaced by CNG.

   1. It is dangerous to burn coal in a closed room.
   2. Carbon dioxide is an excellent fire extinguisher.
   3. Water is not suitable for fires involving oil and petrol.
   4. Food is a fuel for our body.
   5. We should take special care in storing kerosene.

VI. ANSWER THE FOLLOWING:
1. List the 3 requirements of fire.

2. Name the 3 different zones of a flame.
3. What is a good fuel?


5. Name any 2 a) combustible substances. 
   b) inflammable substances 
   c) non combustible substances

6. Name any 2 chemicals used for making a match stick.

VII. WRITE TRUE OR FALSE, IF FALSE CORRECT THE SAME.

   1. Increased concentration of sulphur dioxide in the air is the cause of Global warming.

   2. Fire caused by oil can be controlled by water.

   3. Inflammable substances have very high ignition temperature.

   4. Cow dung cake is a liquid fuel.

   5. An ideal fuel is expensive and very difficult to make available.

   6. Water is heavier than oil.