

INTERNATIONAL INDIAN SCHOOL, BURAIDAH

2023-2024

CLASS: VIII

WORKSHEET 1 (TERM-2)

SUBJECT: SCIENCE

CHAPTER 11 FORCE AND PRESSURE

I. CHOOSE THE CORRECT ANSWER FROM THE GIVEN OPTIONS:-

1. The pressure which is exerted by air around is known as
a . Force b . atmospheric pressure c. muscular force d . friction
2. A _____ exerted by an object on another is a force .
a. Push or pull b .contact force c. pressure d. magnitude
3. Muscular force is called a _____ force
a. Non contact b. contact c. gravitational d. magnetic
4. Force changes the _____ of body
a. Motion b. speed c. shape d. all of these
5. 1 kilogram weight is equal to
a. 98 N b. 9.8N c. 0.98N d. 0.098N
6. Pressure is equal to
a. Area /force b. Force /area c. volume/force d. force /volume
7. A push or pull on an object is called
a. Pressure b. push-pull c. force d. all of the above

ANSWERS: 1b , 2a , 3b , 4d , 5b , 6b , 7c

II. FILL UP THE BLANKS:-

1. Force per unit area is called _____.
2. Force has _____ as well as directions.
3. The pressure exerted by air around us is known as _____ pressure.
4. _____ and gases exert pressure on the walls of their containers.
5. The envelope of air is known as _____.

ANSWERS: 1. Pressure 2. Magnitude 3. Atmospheric 4. Liquids 5. Atmosphere

III. NAME THE FOLLOWING:

1. Name the force that is exerted by charged body on another charged or uncharged body.
2. Name the SI unit of force.
3. Force per unit area.
4. Name the force used in removing iron scrap from a heap of mixed scrap.
5. Opening the door is an example of which type of force.

ANSWERS: 1.electrostatic force 2.Newton 3. Pressure 4. Magnetic 5. Contact force

IV. DEFINE :

1. Muscular force : The force resulting due to the action of muscles . e.g. Lift a bucket of water
2. Atmospheric Pressure : The pressure exerted by the air that is extending upto many kilometers above the surface of the earth. E.g. pressure exerted on rubber sucker
3. Contact force : A contact force is any force that occurs as a result of two objects making contact with each other. E.g. pushing a bag
4. Pressure: The force acting on a unit area of a surface . e.g. pushing a nail into a wooden plank

CHAPTER 13 SOUND

I. CHOOSE THE CORRECT OPTION:

1. Vibration in a body produces
 - a. Sound /
 - b. energy
 - c. heat
 - d. none of these
2. A shehnai produces sound from
 - a. Vibrating Strings
 - b. vibrating membrane
 - c. vibrating air column /
 - d. none of these
3. The unit of frequency is
 - a. Hertz /
 - b. Hertz/sec
 - c. Hertz/min
 - d. Hertz/hour
4. When the amplitude is small the sound produced is
 - a. loud
 - b. feeble /
 - c. low pitched
 - d. none of these
5. Noise pollution causes
 - a. Lack of sleep
 - b. hypertension
 - c. anxiety
 - d. all of these

ANSWERS: 1a , 2c , 3a , 4b , 5d

II. FILL UP THE BLANKS:

1. Unpleasant sound is called _____.
2. In human beings , the vibration of the _____ produces sounds.
3. Larger the _____ of vibration , the louder is the sound.
4. The number of oscillations or vibration per second is called the _____ of the oscillations.
5. Sound travels through a _____.
6. The eardrum senses the vibration of _____.

ANSWERS: 1. Noise 2. Vocal cords 3. Amplitude 4. Frequency 5. Medium 6. Sound

III. ANSWER IN A WORD OR A SENTENCE:

1. Name one animal which can hear ultrasonic sounds.
2. Name the sound producing organ in humans.
3. Name that part of ear which vibrates when outside sound falls on it.
4. Name the unit used to measure the loudness of sound.
5. On what factor does the pitch of a sound depend?

6. What is the name of passage in outer ear which carries sound waves to the eardrum?
7. What is frequency of oscillation?
8. What is the audible range of frequencies for human ears?
9. What is the relation between 'time-period' and 'frequency' of an oscillating body?
10. Why can ultrasound not be heard by humans?

ANSWERS: 1. Dog

2. voice box /Larynx

3. eardrum

4. Decibel

5. The frequency determines the shrillness or pitch of a sound.

6. Ear canal

7. The number of oscillations per second is called the frequency of oscillation.

8. For human ear, the range of audible frequencies is roughly from 20 to 20,000 Hz.

9. Time Period = $1/\text{frequency}$

10. frequencies of ultrasound are higher than 20,000 Hz.

CHAPTER 14 CHEMICAL EFFECTS OF ELECTRIC CURRENT

I. CHOOSE THE CORRECT ANSWER FROM THE GIVEN OPTIONS:

1. An electric current can produce

- | | |
|--------------------------|---|
| a) heating effect only. | b) chemical effect only. |
| c) magnetic effect only. | d) chemical, heating, and magnetic effects. |

2. Which one of the following solutions will not conduct electricity

- | | |
|----------------|------------------|
| a) lemon juice | b) vine |
| c) tap water | d) vegetable oil |

3. Which of the following metals is used in electroplating to make objects appear shining?

- | | | | |
|---------|-----------|-------------|--------------|
| a) iron | b) copper | c) chromium | d) aluminium |
|---------|-----------|-------------|--------------|

4. When electrodes are immersed in water and electricity passed, the bubbles formed on the negative terminal is actually

- a) Hydrogen b) Carbon di oxide c) Oxygen d) Nitrogen

5. LED glows:

- (a) when a strong electric current flows through it
(b) whenever a weak electric current flows through it
(c) when no electric current flows through it
(d) none of these

6. Current is the flow of:

- (a) electrons
(b) protons
(c) neutrons
(d) none of these

7. Distilled water is

- (a) Poor conductor
(b) Good conductor
(c) Poor conductor and good conductor
(d) None of these

ANSWERS: 1d , 2d , 3c , 4a , 5b , 6a , 7a

II. FILL UP THE BLANKS:

- 1) The object to be electroplated is taken as _____ electrode.
2) One of the most common applications of chemical effect of electric current is _____.
3) Small amount of a mineral salt present naturally in water makes it a _____ of electricity.
4) Electroplating of _____ is done on objects like water taps and cycle bell to give them a shiny appearance.

ANSWERS : 1. Cathode 2. Electroplating 3. Conductor 4. Chromium

III. ANSWER IN ONE WORD OR A SENTENCE:

1. What are the substances that conduct electricity through them known as?
2. Name two metal objects which have a coating of another metal.
3. What do we get on electrolysis of acidified water?
4. Which metal is plated on handle bars of cycles and rim of wheels?
5. What is the full form of LED?
6. How do we check the electric current?
7. Why is a layer of zinc coated over iron?
8. Why we use chromium electroplating on taps and bars of bicycle instead of silver and gold?

ANSWERS:

1. Good conductors
2. Handlebars of bicycles, bathroom taps.
3. Hydrogen and oxygen gas.
4. Chromium
5. Light Emitting Diode.
6. by using a tester.
7. To prevent iron from corrosion and rust.
8. Silver and gold are very expensive comparatively to chromium.

CHAPTER 15 SOME NATURAL PHENOMENA

I. CHOOSE THE CORRECT ANSWERS:

1. Name the resin which produces spark is
a. Gum b. Amber c. Both a and b d. None of these
2. The like charges
a. Repel each other b. Attract each other c. No interaction takes place d. All of these
3. The shaking of earth is called
a. Tsunami b. Volcano c. Earthquake d. All of these
4. Lightening occurs due to
a. Electric discharge b. Rain c. Wind d. God's anger
5. Interaction of charges is called
a. Lightening b. Electrical discharge c. Earthing d. Electricity
6. Benjamen Franklin showed lightening in

- a. 1725 b. 1527 c. 1752 d. 1572

7. The charge acquired by a glass rod when it is rubbed with silk is

- a. Negative b. Positive c. Both d. None

ANSWERS:

1. B 2. A 3. C 4. A 5. A 6. C 7. B

II. FILL IN THE BLANKS:

1. There are two kinds of charges _____ and _____ charge.
2. It is not possible to predict the occurrence of an _____.
3. _____ can protect buildings from the effects of lightning.
4. The earthquake measuring _____ or more on Richter scale can cause severe damage to life and property.
5. An _____ may be used to detect whether a body is charged or not.
6. The electric charges produced by rubbing are called as _____ charges.
7. The process of transferring of charge from a charged object to the earth is called _____

ANSWERS: 1. Positive , negative 2. Earthquake 3. Lightning conductor 4. 7

5. Electroscope 6. Static 7. Earthing

III. ANSWER IN A WORD OR IN A SENTENCE:

1. How will you charge a glass rod by the method of friction?
2. What is a flash of light which occurs in the sky during the rainy season called?
3. What kind of electric charge is acquired by a plastic comb rubbed with dry hair?
4. What is the instrument used to measure and record an earthquake?
5. What are seismic waves?
6. Name the scientist who showed that lightning and the spark from your clothes are essentially the same phenomena.

ANSWERS:

1. A glass rod can be charged by rubbing it with silk cloth.
2. Lightning
3. Negative charge
4. Seismograph
5. The tremors produce waves on the surface of the earth. These are called seismic waves.
6. In 1752 Benjamin Franklin

IV. DEFINE:

1. Electroscope : A device which is used to test whether an object carry a charge or not.
2. Earthing : The process of transferring of charge from a charged object to the earth.

