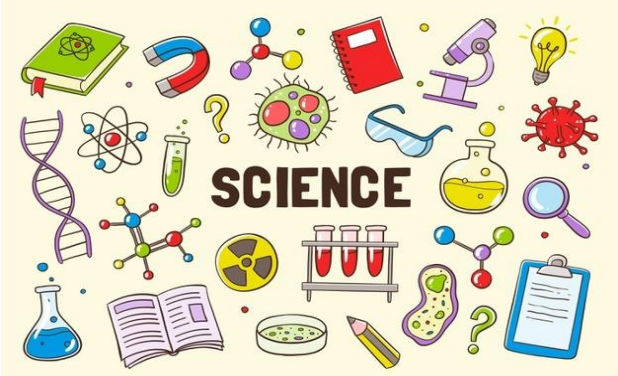
District Public School& College Depalpur

Winter Task, home Assignments, work sheets and Activities

2nd semester

(Academic Session: 2020-21)



Subject: science

Class: 5th

Student's Name: _____

Father's Name: _____

Block Syllabi of 2nd Semester 2020-2021

Class: ___5th____ **SUBJECT : SCIENCE**

Unit 7: Environment

(Book and work book)

- Types of pollution (land , noise) (pg # 60,61) (pg#64 Q.1,2)

Unit 8: Matter and Material

(Book and work book)

- Matter and particles. (pg #70,71) (pg#72 Q1,2)
- Changing matter , (Melting , freezing) (pg#72,73) (pg#75 Q.2,3,4,5)

Unit 9: Heat, Light, And Sound

(Book and work book)

- Sound (pg #82,83,84) (pg#85 Q.6,7,8)

Unit 10: Forces

(Book and work book)

- Mass and weight (pg# 86,87) (pg# 89 Q.4)

Unit 11: Electricity And Magnetism

(Book and work book)

- Conductors and insulators (pg # 93,94)(pg# 95 Q.3, Q.5(b,c))

Unit 12: The Solar System

(Book and work book)

- The Sun (pg# 96,97,98) (pg #105 Q 1,2,4)

Date: 26 November, 2020 Day: Thursday

CHAPTER 07: Environment

Topic: Pollution **Book page: 2-3**

Learning Objectives: Student will be to understand the concept of pollution and different types of pollution.

Question.1 Fill in blanks

- Dumping waste can_____the land. (Contaminate)
- Noise pollution is _____. (Unwanted noise)
- _____ occurs when a part of environment becomes unhealthy for the organisms that live in it. (Pollution)
- Noise pollution can interfere with the_____of some animals.(Navigation system)
- Use of _____kills the micro organisms essential for soil.(chemical pesticides)

Question .2 Choose the correct option

There are_____ types of pollution:

(A)four (B) two (C) three **(D) five**

Noise pollution causes:

(A)Hearing loss (B) stress **(C) Both a & b** (D) None

Rachel carson was a great:

(A) Environmentalist (B) Doctor (C) Teacher (D) Pilot

Question .3 Questions / Answer

Q: 1 Who was Rachel Carson?

Answer: Rachel Carson was a great environmentalist. She is well known for her writings on environmental pollution and natural history of sea.

Answer:_____

_____

_____

_____

Q: 2 Define Pollution. Why it must be avoided?

Answer: Pollution occurs when a part of environment becomes unhealthy for the organisms that live in it. It must be avoided because it can lead to health problems

Example: land pollution, Noise pollution

.

Answer:_____

_____

_____

Q:3 What is noise pollution?

Answer: unwanted noise or sound that disturbs the environment

Answer:_____

_____

_____

Q:4 What are the causes of noise pollution?

Answer: Noise pollution is caused by

- Heavy traffic on roads
- Aero planes / Air traffic
- Industrial machinery

Answer:_____

_____

_____

Q:5 What are the effects of noise pollution on humans?

Answer:

- Hearing loss
- Stress
- High blood pressure
- Lack of sleep

Answer:_____

_____

_____

_____

Q:6 What are the effects of noise pollution on wildlife?

Answer:

- it may interfere with the navigation system of some animals such as bats
- It may cause death

Answer:_____

_____

_____

Q:7 What are the causes of land pollution?

Answers: Land pollution is caused by

- Use of chemical pesticides
- Dumping of rubbish
- Poisonous an dangerous chemicals used by factories

Answer:_____

_____

_____

_____

Activity:

Enlist Different types of pollution that you have observed in your environment

Date: 27 November, 2020 **Day: Friday**

Assessment

CHAPTER 07: Environment

Topic: Pollution **Book page: 3-4**

Learning Objectives: To access the students learning ability

Question/Answers

Question 1: Define Pollution. Why it must be avoided?

Answer:_____

_____

_____

_____

Question 2: What are the effects of noise pollution on humans?

Answer:_____

_____

_____

_____

Question 3: What are the causes of land pollution?

Answer:_____

_____

_____

_____

Question 4: Who was Rachel Carson?

Answer:_____

_____

_____

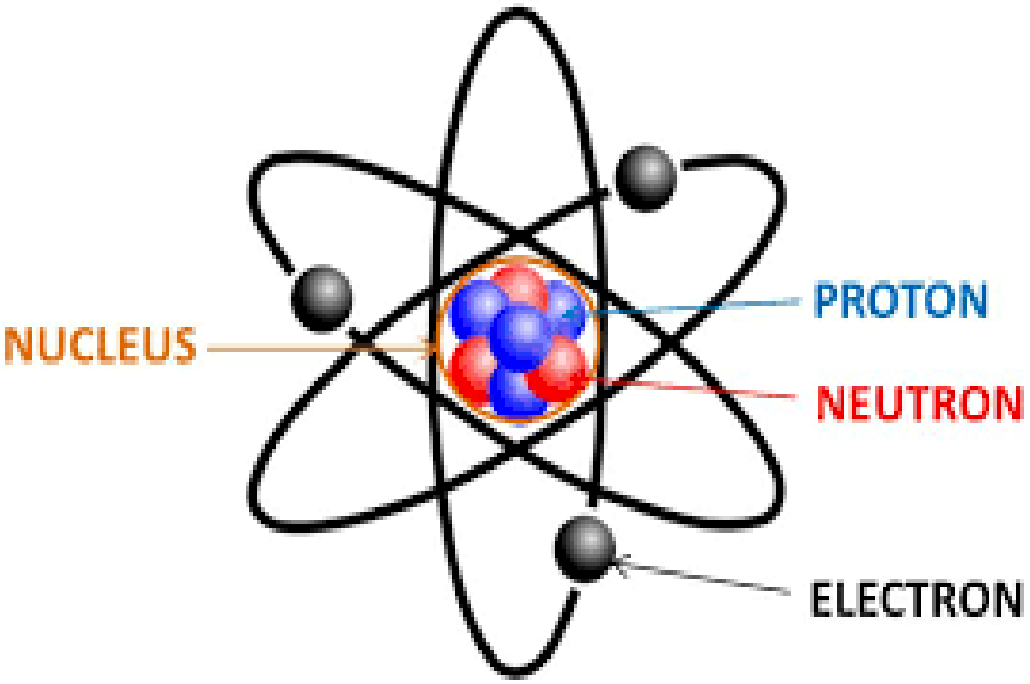
_____

Date: 28November, 2020 **Day: Saturday**

CHAPTER 08: Matter and Materials

Topic: Matter and particles **Book page: 2-3**

Learning Objectives: Student will be able to understand the concept of Particles such as atoms and molecules.



Question.1 Fill in blanks

- Solid water is _____(ice)
- An atom has a centre called_____(Nucleus)
- All matter is made up of_____(atoms)
- There are____main forms of matter(three)
- Water as a gas is_____(steam)

Question .2 Choose the correct option

Heat is a type of

(A)Pollution (B) Sound (C) Matter **(D) Energy**

Water molecule is made up of 2 hydrogen atoms and a_____ atom

(A)Carbon **(B) Oxygen** (C)Nitrogen (D) Calcium

_____is present in the centre of atom:

(A)Nucleus (B) Solid (C) Gas (D) Liquid

Question .3 Questions / Answer

Q 1: What does the term 'particle' mean?

Answer: Particles are very small particles that makeup something larger

Example: proton, neutron, electron, atoms and molecules

Answer:_____

_____

_____

Q 2: Define molecule?

Answer: A molecule is two or more atoms joined together

Example: water molecule (H2O) is made up of two hydrogen atoms and one oxygen atom

Answer:_____

_____

_____

Q 3: What determines whether a matter is in its solid state, liquid or gas?

Answer: The movement and arrangement of particles.

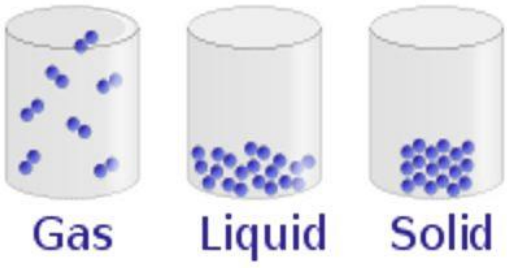
Answer:_____

_____

_____

Q 4: Name the forms of matter

Answer: There are three forms of matter. Solid, liquid and gas.



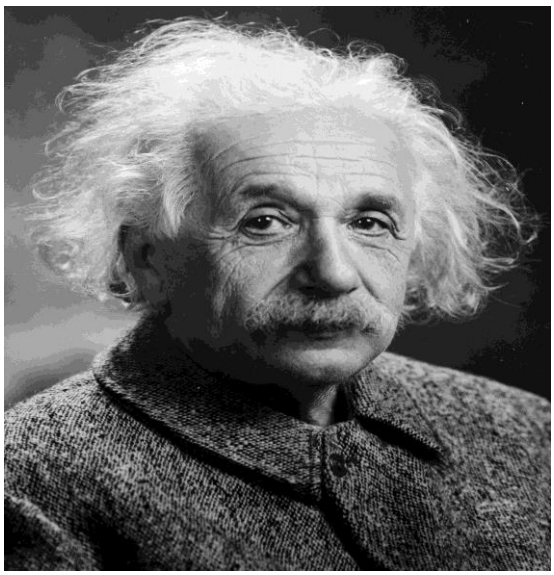
Answer:_____

_____

_____

_____

Activity: Scientist Albert Einstein



- Albert Einstein was a German-born physicist who developed the special and general theories of relativity
- He won the Nobel Prize for Physics in 1921.
- Relativity also showed us that matter and energy are just two different forms of the same thing

Q1: Who was Albert Einstein?

Answer:_____

_____

_____

Q2: What does theory of relativity show?

Answer:_____

_____

_____

Date: 30 November, 2020 Day: Monday

Assessment

CHAPTER 08: Matter and Materials

Topic: Matter and particles

Learning Objectives: To access the students learning ability

Question/Answers

Q 1: What does the term 'particle' mean?

Answer:_____

_____

_____

Q 2: Define molecule?

Answer:_____

_____

_____

Q 3: What determines whether a matter is in its solid state, liquid or gas?

Answer:_____

_____

_____

Q 4: Name the forms of matter.

Answer:_____

_____

_____

_____

Q 5: Draw water molecule.

Answer:

Date: 1 December, 2020 Day: Tuesday

CHAPTER 08: Matter and Materials

Topic: Changing Matter Book page: 2-3

Learning Objectives: Student will be able to understand the effect of heating on matter.

Question.1 Fill in blanks

- _____is opposite to melting (Freezing)
- _____changes matter from solid to liquid(Melting)
- Melting point of ice is_____(0 c)
- Heating matter gives the particles____ (Energy)
- Freezing matter changes it from a liquid to_____(solid)

Question .2 Choose the correct option

1) Melting point of gold is_____

(A) 100 (B) 60 (C) 0 **(D) 1000**

2) Melting is opposite to_____

(A) Boling **(B) freezing** (C) Evaporation (D) Condensation

3)Freezing changes matter from liquid to_____

(A)Solid (B) vapors (C) Gas (D) Liquid

Question .3 Questions / Answer

Q 1: How do solids melt?

Answer: Heating solid matter gives the solid particles energy. These particles move away from each other and solid changes to liquid.

Answer:_____

_____

_____

Q 2: How heating can affect matter?

Answer: Heating can affect matter by changing it form one state to another by melting, freezing etc

Answer:_____

_____

_____

Q 3: How does freezing of matter take place?

Answer: when liquid is frozen, the particles stop moving and come close to each other till the liquid changes to solid.

Answer:_____

_____

_____

Q 4: What is melting and freezing?

Answer:

Melting; Matter Changes from solid to liquid. Example:ice melts at 0 c, Gold melts at 1000c

Answer:_____

_____

_____

_____

Q 5: What is freezing?

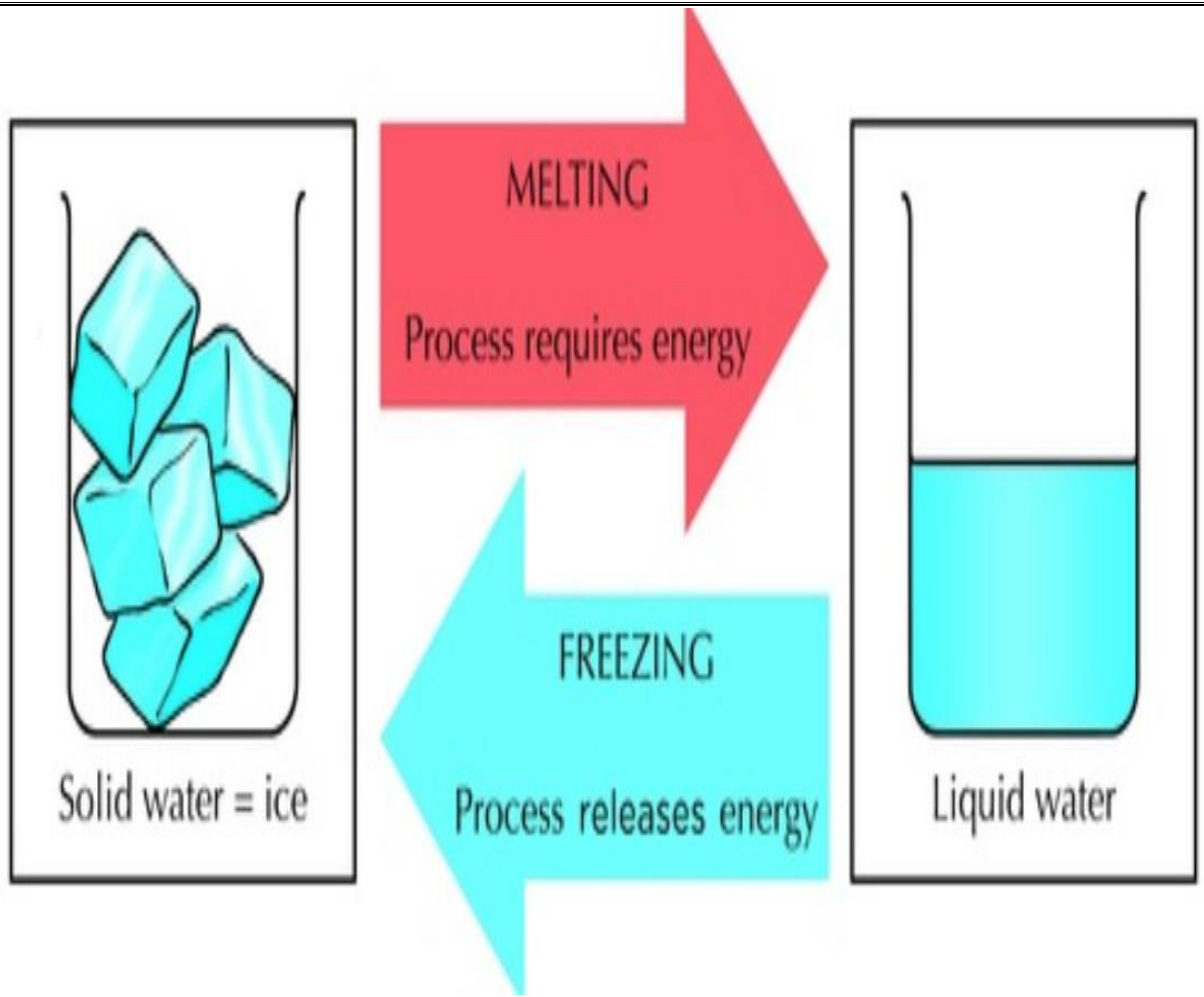
Answer:

Freezing: Matter changes from liquid to solid, Example: wax freezes at 60 c

Answer:_____

_____

_____



Date: 3 December, 2020 Day: Thursday

Assessment

CHAPTER 08: Matter and Materials

Topic: Changing Matter

Learning Objectives: To access the students learning ability

Questions / Answer

Questions 1: How do solids melt?

Answer:_____

_____

_____

Questions 2: How does freezing of matter take place?

Answer:_____

_____

_____

Questions 3: What is melting and freezing?

Answer:_____

_____

_____

Questions 4: How heating can affect matter?

Answer:_____

_____

_____

_____

Date: 7 December, 2020 Day: Monday

CHAPTER 09: Heat, light and sound

Topic: Sound Book page: 2-3

Learning Objectives: To introduce the idea of different sounds.

Question.1 Fill in blanks

- Sound waves travel_____in cold water.(slower)
- Dolphins and bats use_____to travel. (Echolocation)
- _____is the collection of different sounds.(Music)
- _____is when the same sound is heard more than once.(Echo)
- When original sound is heard for longer time, this is_____(Reverberation)

Question .2 Choose the correct option

Animals use echolocation_____

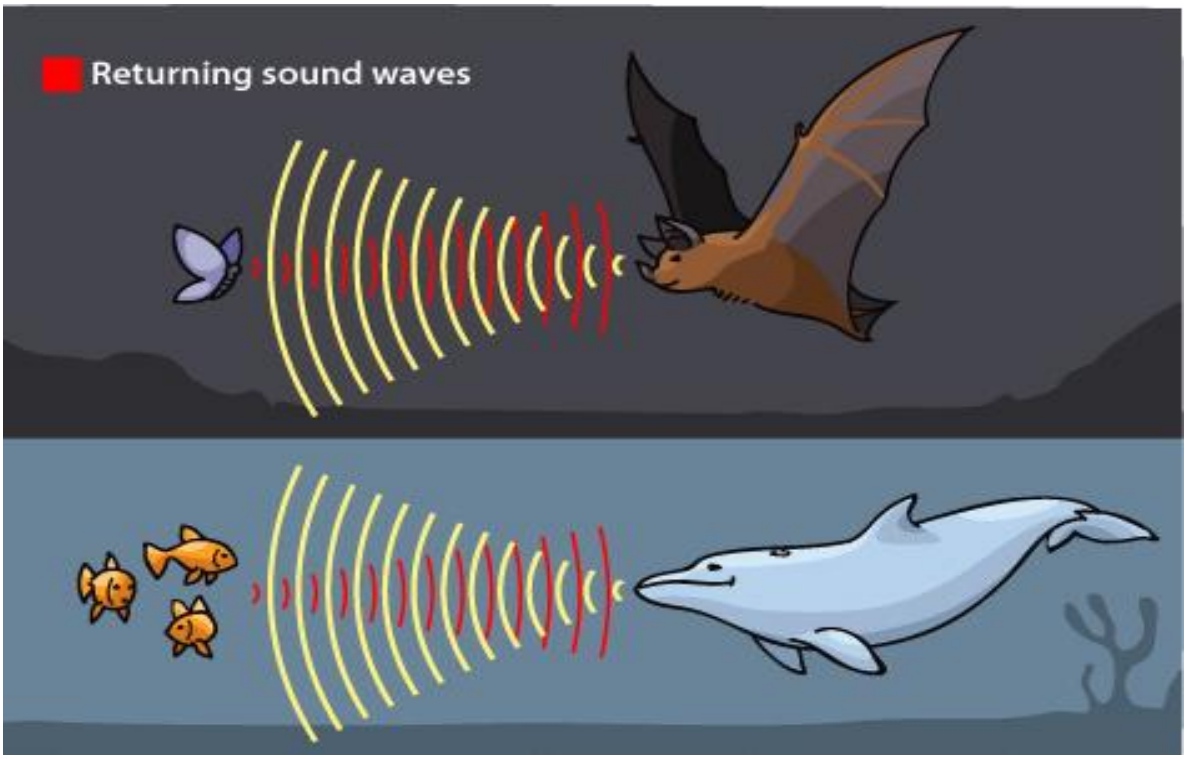
(A) Bats (B) Dolphins **(C) Both** (D) none

_____is collection of different sounds

(A) **Music** (B) Heating (C) Echo (D) Reverberation

Whensound hits a soft surface, most of the sound is not reflected its is

(A)Absorbed (B) reflected (C) Bounced (D) return



Question .3 Questions / Answer

Q 1:What is an echo?

Answer: Echo is when the same sound is heard more than once.

Answer_____

_____

_____

_____

Q 2: How an echo is produced?

Answer: When sound waves are reflected or bounced back from the surface echo is produced

Answer:_____

_____

_____

_____

Q 3: What is reverberation?

Answer: Reverberation occurs when the echo is too short to be heard and the original sound continues to be heard for longer time.

Answer:_____

_____

_____

_____

Q 4: What is echolocation?

Answer: Sound waves are sent out to locate objects. Dolphins and bats do this to travel.

Answer:_____

_____

_____

Q 5: What is Music?

Answer: Collection of different sounds.

Answer:_____

_____

_____

Activity 1: Use different mediums to recognize echo and reverberation.

Date:9 December, 2020 Day: Wednesday

Assessment

CHAPTER 09: Heat, light and sound

Topic: Sound

Learning Objectives: To access the students learning ability

Questions / Answer

Q1: How an echo is produced?

Answer:_____

_____

_____

Q2:What is an echo?

Answer:_____

_____

_____

Q3:What is reverberation?

Answer:_____

_____

_____

Q4: What is Music?

Answer:_____

_____

_____

Q5: What is echolocation?

Answer:_____

_____

Date: 11 December, 2020 Day: Friday

CHAPTER 10: Forces and Machines

Topic: Mass and Weight Book page: 2-3

Learning Objectives: To Enable the students to understand the difference between mass and weight.

Question.1 Fill in blanks

- Mass is measured in_____(kilogram)
- As an objects moves away from earth its weight_____(decreases)
- Force that pulls us towards the earth_____(gravity)
- The weight of an object is measured in_____(newtons)
- Objects float in space because of_____(weightlessness)

Question .2 Choose the correct option

This is the amount of matter contained in an object_____

(A) weight (B)Force **(C)Mass** (D) none

Force that attract objects' towards the earth_____

(A) **Gravity** (B)Friction (C)buoyancy (D) Reverberation

Weight is measured in

(A)Newtons (B)kilograms (C)Seconds (D) Meter

Question .3 Questions / Answer

Q1: What is the difference between mass and weight?

Answer:

Mass	Weight
Amount of matter in an object	Amount of gravitational force on an object

Measured in kilograms	Measured in Newton's

Answer:_____

_____

_____

Q2: What happens to the astronauts weight and mass in space?

Answer: their mass remain the same since there is no force of gravity in space astronauts floats due to weightlessness

Answer:_____

_____

_____

Q3:Define gravity?

Answer: the force that pulls the objects towards the center of earth.

Answer:_____

_____

_____

Activity:

1) **Take a heavy and lighter object to observe weight and mass and write here.**

   _____

   _____

   _____

   _____

   _____

   _____

   _____

2) **Write a paragraph about Isaac Newton.**

Sir Isaac Newton PRS was an English mathematician, physicist, astronomer, theologian, and author who is widely recognized as one of the most influential scientists of all time Newton's law of universal gravitation is usually stated as that every particle attracts every other particle in the universe with a force that is directly proportional to the product of their masses and inversely proportional to the square of the distance between their centers

Q1: Who was Isaac Newton?

Answer:_____

_____

_____

Q2: What is law of universal gravitation?

Answer:_____

_____

_____

Date:14 December, 2020 Day: Monday

Assessment

CHAPTER 10: Forces and Magnetism

Topic: Mass and weight

Learning Objectives: To access the students learning ability

Questions / Answer

Q1: What is the difference between mass and weight?

Answer:_____

_____

_____

Q2: What happens to the astronauts weight and mass in space?

Answer:_____

_____

_____

Q3: Define gravity?

Answer:_____

_____

_____

Date: 15 December, 2020 Day: Tuesday

CHAPTER 11: Electricity and Magnetism

Topic: Conductors and insulators Book page: 2-3

Learning Objectives: To Enable the students to understand the difference between conductor and insulators

Question.1 Fill in blanks

- _____ allows an electric current to flow easily.(conductors)
- You can use_____electricity at home.(current)
- _____do not allow electricity to pass through them.
- Lightning rods are _____invention.(Benjamin Franklin)
- Lightning rods uses _____in the ground(earth wires)

Question .2 Choose the correct option

Lightning rods are _____invention

(A) Benjamin Franklin (B)Isaac Newton (C)Rachel Carson (D) none

_____ allows an electric current to flow easily.

(A) Conductor (B) insulator (C) both (D) none

You canuse_____electricity at home.

(A)Tides **(B)Current** (C)Nuclear (D) Meter

Date: 17 December, 2020 Day: Wednesday

CHAPTER 11: Electricity and Magnetism

Topic: Conductors and insulators Book page: 2-3

Question .3 Questions / Answer

Q1: Differentiate between conductors and insulators.

Answer:

conductors	Insulators.
Allows an electric current to flow easily	Do not allows an electric current to flow easily
Example: Steel , Iron	Example: Wood

Answer:_____

_____

_____

_____

_____

_____

Q2: What are lightning rods?

Answer: lightning rods protect the buildings in the event of lightning by conducting through an earth wire into the ground. Lightning rod is Benjamin Franklin invention

Answer:_____

_____

_____

_____

Activity:1) Enlist insulators and conductors.

_____

_____

_____

_____

_____

_____

2) Write few lines about Benjamin Franklin

- He Was an American polymath and one of the Founding Fathers of the United States. Franklin was a leading writer, printer, political philosopher, politician, Freemason, postmaster, scientist, inventor, and humorist,
- The pointed **lightning rod** conductor, also called a **lightning** attractor or **Franklin rod**, was **invented** by **Benjamin Franklin** in 1752 as part of his groundbreaking exploration of electricity.

Q1: Who was Benjamin Franklin?

Answer:_____

_____

_____

Q2: What was invented by Benjamin Franklin?

Answer:_____

_____

Q3: **Learn the names of these insulators.**

Date: 18 December, 2020 Day: Thursday

Assessment

CHAPTER 11: Electricity and Magnetism

Topic: Conductors and insulators

Learning Objectives: To access the students learning ability

Questions / Answer

Q1: Differentiate between conductors and insulators.

Answer:_____

_____

_____

_____

_____

Q2: What are lightning rods?

Answer:_____

_____

_____

_____

Q3: Enlist insulators and conductors

Answer:_____

_____

_____

_____

_____

_____

Date: 19 December, 2020 Day: Saturday

CHAPTER 12: The solar system

Topic: The sun Book page: 2-3

Learning Objectives: To Enable the students to understand the position of sun in solar system.

Question.1 Fill in blanks

- Sun is in the center of _____ (solar system)
- Photographs of earth are taken by_____(Hubble telescope)

- There is about_____ % of hydrogen in sun (70%)
- Huge explosions on the sun are_____(solar flares)
- Sun is believed to be about_____years old(five billion)

Question .2 Choose the correct option

Percentage of helium in sun is_____

(A)50 (B)40 **(C)30** (D) none

Force that attract objects' towards the earth_____

(A)Five billion (B) two billion (C) three billion (D) none

Darker areas of sun are

(A)sun spots (B)solar winds (C)solar flares (D) solar system

Question .3 Questions / Answer

Q1: What do you know about solar system?

Answer: Solar system is all the planets , moons and other bodies that depend on sun for heat and light

Answer:_____

_____

_____

_____

Q2: How old is sun?

Answer: Sun is five billion years old

Answer:_____

_____

_____

_____

Date: 21 December, 2020 Day: Monday

CHAPTER 12: The solar system

Topic: The sun **Book page: 2-3**

Q3: What is sun composed of?

Answer: Sun is composed of burning gases 70% hydrogen 30% helium

Tiny amount of carbon, iron, magnesium, neon, oxygen, nitrogen etc

Answer:_____

_____

_____

_____

Q4: What is the position of sun in solar system?

Answer: Sun is in the center of earth

Answer:_____

_____

_____

_____

Q5: Name the planets nearest and farthest to the sun

Answer: The order of the planets from nearest to the farthest to the sun mercury, venus, earth, mars, Jupiter, Saturn, Uranus, Neptune

Answer:_____

_____

_____

_____

Q6: What are solar flares?

Answer: Solar flares are huge explosions on the sun that discharge gases into the atmosphere

Answer:_____

_____

_____

Q7: What are solar winds?

Answer: solar winds occur when gas particles from sun come in contact with gases of earth. They cause light shows

Answer:_____

_____

_____

_____

Q8: What are sun spots?

Answer: sun spots are the darker areas of sun. These areas are cooler than the lighter areas.

Answer:_____

_____

_____

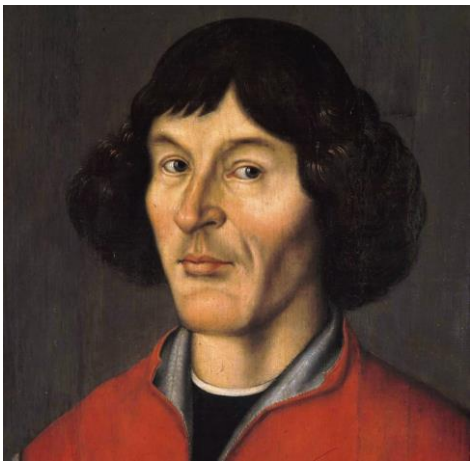
_____

Date: 22 December, 2020 Day: Tuesday

CHAPTER 12: The solar system

Topic: The sun Book page: 2-3

Activity: 1) Nicolas Copernicus



- Nicolas Copernicus was a mathematician and astronomer
- He formulated a model of the universe that placed the Sun rather than Earth at the center of the universe.

Q1: who was Nicolas Copernicus?

Answer:_____

_____

_____

Q2: Write down his discovery.

Answer:_____

_____

_____

_____

Date:23 December, 2020 Day: wednesday

CHAPTER 12: The solar system

Topic: The sun **Book page: 2-3**

Activity: 2) Add some facts on the poster of solar system about Sun

Date : 24 December 2020 **Day: Thursday**

Assessment

CHAPTER 12: The solar system

Topic: The sun

Learning Objectives: To access the students learning ability

Questions / Answer

Q1:How old is sun?

Answer:_____

_____

_____

_____

Q2: What is sun composed of?

Answer:_____

_____

_____

_____

Q3: What is the position of sun in solar system?

Answer:_____

_____

_____

_____

Q4: What are solar flares?

Answer:_____

_____

_____

_____

Q5: What are solar winds?

Answer:_____

_____

_____

_____

Q6: What are sun spots?

Answer:_____

_____

_____

_____