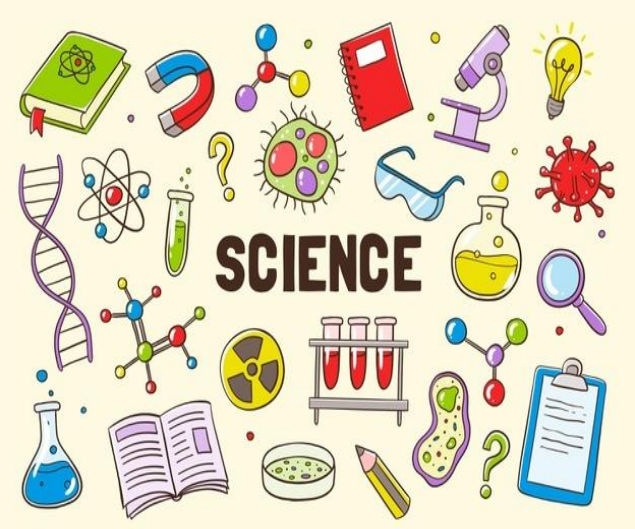
District Public School & College Depalpur

Winter Task

Home Assignments, work sheets and activities

(Second semester)

(Academic Session: 2020-21)



Subject: Science

Class : 3

Student name:_____

Father name:_____

2ND Semester block syllabi (class 3)

Unit 6 Matter and material

- **Solid** **(work pages 19,21)**
- Liquid
- gas

Unit 7 Water

- All life needs water (**work pages 22,23,24)**
- The water cycle

Unit 8 Force, work and energy

- Force and motion
- Work and energy **(work pages 27,28)**

Unit 9 Heat and Light

- Heat
- Light **(work pages29,30,31,32,33)**

Unit 10 Electricity and magnetism

- Electrical conductors and insulators
- What is magnetism? **(work pages34,35,36)**

Unit 11 The solar system

- The sun
- Day and night **(work pages 37,38)**

Date: 26th November,2020 Day: Thursday

UNIT 6 Matter and material

TOPIC: **Solid**

Learning outcomes: **TO enable the students to answer the given gaps**

Question: Fill in the blanks.

1):_____ has definite shape, mass and volume.

a) Solid b) liquid c) gas d) none

2): _____ can change the shape and size.

a) Force b) liquid c) gas d)none

3): The particles of _____ are tightly packed together.

a) Solid b) liquid c) gas d) none

4): Solid can be _____.

a) Hard b) soft c) large d) all of above

5): The Earth softest natural mineral is_____.

a) Salt b) talc c) diamond d) all of above

Key words: 1(solid) 2 (force) 3 (solid) 4 (all of above) 5 (talc)

Date: 27th November,2020 Day: Friday

UNIT6 Matter and material

TOPIC: **Liquid**

Learning outcomes: To enhance the students learning ability

Question: Fill in the gaps.

1) **Blood is _____**

(Solid, liquid)

2) **_____ does not have definite shape.**

(Solid, liquid)

3) **The particles of _____ are not tightly packed together.**

(Solid, liquid)

4) **_____ can flow.**

(Solid, liquid)

5)_____ **takes the shape according to container.**

(Solid, liquid)

Date: 28th November,2020 Day:Saturday

UNIT6 Matter and material

TOPIC: **Gases**

Learning outcomes: To enhance the students learning ability.

Question 1: Does gas have definite shape?
Answer: no

Answer:_____
_____
_____
_____

Question 2:Is gas take the shape according to container?
Answer: yes.
Answer:_____
_____
_____
_____

Question 3Can we see the gases?
Answer: No.
Answer:_____
_____
_____
_____

Date: 30th November,2020 Day: Monday

UNIT6 Matter and material

TOPIC: **Assignment**

Learning outcomes: To enable the students to solve the given task.

Question1: Write short notes to describe the following.

Answer: a): Matter: Anything that takes up space is called matter.

_____
_____
_____
_____

b): solid: has definite shape ,mass and volume.

_____
_____
_____
_____

c):liquid: does not have definite shape, but has mass and volume.

_____
_____
_____
_____

d): Gas: Does not have definite shape and volume but has mass.

_____
_____
_____
_____

Question2: Name at least two solids, two liquid and two gases that you come across in your daily life. You can name more if you like.

Answer: solid: chair, humans

Liquid: water, juice

Gases: carbon dioxide, oxygen.

Date: 1st December,2020 Day: Tuesday

Scientist Ernest Rutherford

He was a New Zealand–born British physicist who came to be known as the father of nuclear physics. He discovered that atoms have a tiny dense nucleus. Most important, he postulated the nuclear structure of the atom. Rutherford's new model for the atom, based on the experimental results, contained new features of a relatively high central charge concentrated into a very small volume in comparison to the rest of the atom and with this central volume also containing the bulk of the atomic mass of the atom. This region would be known as the "nucleus" of the atom.

- **Write down about the discovery of Ernest Rutherford.**

_____

_____

- **Ernest Rutherford is known as the father of?**

_____

_____

Date: 2nd December, 2020 Day: Wednesday

Unit 7 Water

Topic: All life needs water and water cycle

Learning outcomes: To enable the students to solve the given task.

Question: Fill in the gaps.

1): About _____ quarter of earth is covered in water.

a) One b) two c) three d) four

2): There are _____ stages of water cycle.

a) One b) two c) three d) four

3): _____is when water is heated and it changes from a liquid to gas.

a) Evaporation b) condensation c) precipitation d) none

4):_____ is when cold air cool the gas and its change into a liquid.

a) Evaporation b) condensation c) precipitation d) none

5):_____ is when the liquid in the sky fall to the ground.

a) Evaporation b) condensation c) precipitation d) none

Key words: 1(c) 2(d) 3(a) 4(b) 5(c)

Date: 3rd December, 2020 Day: Thursday

Unit 7 Water

Topic: Assignment

Learning outcomes: To enable the students to solve the given task.

Question: Describe the water cycle.

Answer: The water cycle shows us how water in rivers ,lakes and ocean is heated by the Sun and rises in the air .Then it cools and fall to the ground again and run downhill and back into river ,ocean and lakes again.

Answer:_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

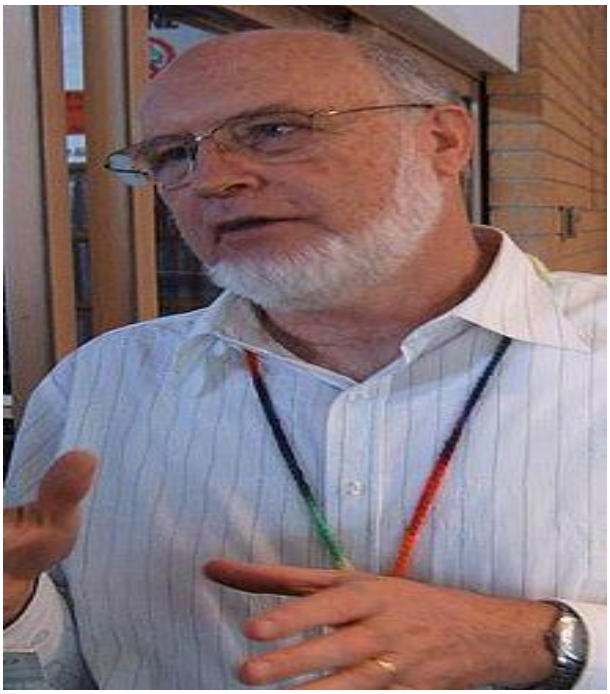
_____

_____

Date: 4th December, 2020 Day: Friday

Activity:

John Williams: John Williams is an Australian scientist whose life work has been in the study of hydrology and the use of water in the landscape and farming, including land salinity. He also served as Adjunct Professor in Agriculture and Natural Resource



Question: What was the work of John Williams?

Answer:_____

_____

_____

Date: 5th December, 2020 Day: Saturday

Unit8 Force ,work and energy

Topic: Force and Motion

Learning outcomes: To enable the students to answer the given question.

Question: What is force?

Answer: Force is push or pull.

_____
_____
_____
_____

Question: What is motion?

Answer: Motion is movement.

_____
_____
_____
_____

Question: Can we move objects without force?

Answer: no

_____
_____
_____
_____

Date: 7th December, 2020 Day: Monday

Unit 8 Force, work and energy

Topic: Work and Energy

Learning outcomes: To enable the students to answer the given question.

Question: Fill in the gaps.

1): Chemical energy stored in _____.

a) Chemicals b) wood c) iron d) none

2): The power tools only work when _____ is provided them.

a) Chemicals b) electricity c) iron d) none

3): There are _____ forms of energy.

a) 1 b)2 c)3 d) 4

4): Potential energy is_____ energy.

a) Stored b)released c)rest d)none

5): Kinetic energy is_____ energy.

a) Stored b) released c) rest d)none

Key words: 1(a) 2(b) 3(b) 4(a) 5 (b)

Date:8th December,2020 Day: Tuesday

Unit 8 Force, work and energy

TOPIC: Assignment

Learning out comes: To enable the students to answer the following question.

Question: What is energy?

Answer: Energy is ability to do work.

_____
_____
_____
_____

Question: Explain how the following types of energy work:

Answer: a) Chemical energy: stored in chemicals. It is released when they react.

_____
_____
_____
_____
_____
_____
_____
_____

b): Heat energy: is also called thermal energy. It comes from burning of wood, oil, coal.

c): Gravitational energy: is motion that is caused by gravity.

d):Electrical energy: is when electricity creates motion heat and light.

Question: What is difference between potential energy and kinetic energy?

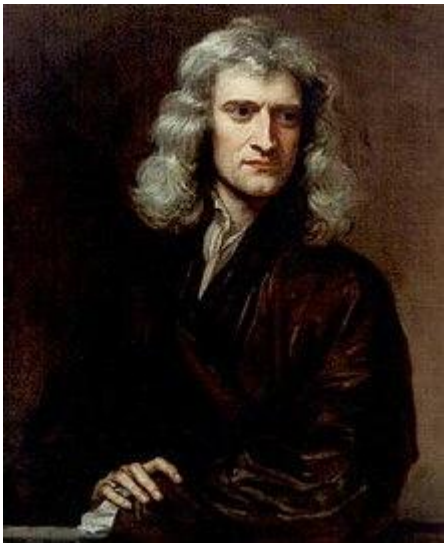
Answer: Potential energy: that s stored and not being used.

Kinetic energy: due to motion.

Date: 9th December,2020 Day: Wednesday

Activity

Isaac Newton **He was an English mathematician, physicist, astronomer, theologian, and author (described in his own day as a "natural philosopher") In Principia, Newton formulated the laws of motion and universal gravitation. 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**.



Question: Who was Issac Newton?

_____

_____

Date: 10th December, 2020 Day: Thursday

Unit 9 Heat and light

Topic: Heat

Learning outcomes: To enable the students to answer the given question.

Question: Fill in the gaps.

1): Heat is form of_____

a) Energy b) molecules c) temperature d) none

2): Heat is produced when _____ start moving.

a) Energy b) molecules c) temperature d) none

3): On Celsius scale water boil on _____ Celsius.

a) 50 b) 20 c) 100 d) none

4): On Celsius scale water freeze on _____ Celsius.

a) 0 b) 20 c) 100 d) none

5):_____ scales are used for measuring temperature.

a) 1 b) 2 c) 3 d) none

Key words: 1(a) 2(b) 3(c) 4(a) 5(2)

Date: 11th December,2020 Day: Friday

Unit 9 Heat and light

Topic: Heat

Learning outcomes: To enable the students to answer the given question.

Question: How is heat produced?

Answer: Heat is produced when molecules start moving.

_____

_____

_____

_____

Question: What is temperature? How is it measured?

Answer: Temperature is how hot and cold something is. It is measured by thermometer.

_____

_____

_____

_____

_____

_____

_____

_____

Question: Explain why ice cream melts.

Answer: Because heat is transferred from environment to cold ice cream.

_____

_____

_____

_____

_____

_____

_____

_____

Date: 12th December,2020 Day: Saturday

Unit 9 Heat and light

Topic: Light

Learning outcomes: To enable the students to answer the given question.

Question: Match column 1 to column 2

Light travels	**Give out light**
Luminous objects	**When light is blocked by opaque object**
Non Luminous objects	**In straight line**
Shadow is formed	**Don't give out light**
Sun is	**Luminous object**

Key words: 1(3) 2(1) 3(4) 4(2) 5(5)

Date: 14 December, 2020 Day: Monday

Unit 9 Heat and light

Topic: Light

Learning outcomes: To enable the students to answer the given question.

Question: How does light travel?

Answer: Light travels in straight line.

_____
_____
_____
_____

Question: What does the length of light wave depend on?

Answer: The length of light wave depends on its colour.

_____
_____
_____

_____
_____
_____
_____

Question: How is shadow formed?

Answer: Shadow is formed when light is blocked by an opaque object.

_____
_____
_____
_____

_____

_____

_____

_____

Question: What is difference between luminous and non-luminous objects?

Answer: Luminous objects give out light off their own.

Non luminous objects: don’t give out light.

_____

_____

_____

_____

_____

_____

_____

_____

Date: 15th December, 2020 Day: Tuesday

Activity:

James Prescott Joule

James Prescott Joule studied the nature of heat and established its relationship to mechanical work. He laid the foundation for the theory of conservation of energy, which later influenced the First Law of Thermodynamics.

Question: What are the achievements of James Prescott Joule?

Answer:_____

_____

_____

_

Date: 16th December,2020 Day: Wednesday

Uni 10 Electricity and Magnetism

Topic: Electrical conductors and Insulators

Learning Outcomes: To enable the students to fill in the gaps.

Question: Fill in the gaps.

1): Electricity reaches our homes through_____.

A) Wood b) wires c) glass d) none

2): Electricity can flow through some materials easily known as _____

A) Conductor b) insulators c) glass d) none

3): Electricity cannot flow through some materials easily known as _____

A) conductor b)insulators c) glass d) none

4): _____and _____ are example of insulators.

A) plastic b) insulators c) glass d) both a,b

5): _____and _____ are example of conductors.

A) gold b) water c) glass d) both a,b

Keywords: 1(b) 2(a) 3(b) 4(d) 5(d)

Date: 17th December,2020 Day: Thursday

Unit 10 Electricity and Magnetism

Topic: Electrical conductors and Insulators

Learning Outcomes: To enable the students to answer the following questions.

Question: What are conductors? Name some of them.

Answer: Conductors are materials through which electricity can pass.

For examples: copper, gold, water, silver.

_____
_____
_____
_____
_____
_____
_____
_____

Question: What are insulators? Name some of them.

Answer: Insulators are materials through which electricity cannot pass.

For examples: glass, plastic, rubber.

_____
_____
_____
_____

_____
_____
_____
_____

Question: Why is important for humans to be careful with electricity?

Anwer: Because humans are good conductors of electricity.

_____
_____
_____
_____

_____
_____
_____
_____

Date: 18th December,2020 Day: Friday

Unit 10 Electricity and Magnetism

Topic: What is magnetism?

Learning outcomes: To enable the students to answer the following questions.

Question: Choose the correct option.

1): Magnetism is a force that _____and _____ objects.

a) attract b) repel c) same d) both a,b

2):Repelling means _____ away.

a) attracting b) pushing c) same d) none

3):Magnetisms have two ends known as _____ .

a) edges b) poles c) direction d) none

4):Unlike poles _____ each other.

a) attract b) repel c) same d) none

5):like poles _____ each other.

a) attract b) repel c) same d) none

Key words: 1(d) 2(b) 3(b) 4(a) 5(b)

Date: 19th December,2020 Day: Saturday

Unit 10 Electricity and Magnetism

Learning outcomes: To enable the students to answer the following questions

Question: What is meant by magnetism?

Answer: Magnetism is force that attracts or repel.

_____
_____
_____
_____

Question: What part of two magnets will

a).attract each other

b). repel each other

Answer: a): attract each other :north and south pole

_____
_____
_____
_____

b). repel each other: two north and two south poles.

_____
_____
_____
_____

Date: 22th December, 2020 Day: Tuesday

Unit 11 The solar system

Topic: The Sun

Learning outcomes: To enable the students to fill in the gaps.

Question: Fill in the gaps.

1): The sun is largest body and in _____ of our solar system.

(last, centre)

2):Sun shape is like _____.

(oval , sphere)

3):The earth complete its _____ in 365 days.

(revolution , rotation)

4):The earth complete its _____ in 24 hours.

(revolution , rotation)

5):The earth also _____ on its axis.

(spins, circle)

Key words: 1(centre) 2(sphere) 3(revolution) 4(rotation) 5(spin)

Date: 23th December,2020 Day: Wednesday

Unit 11 The solar system

Topic: The Sun

Learning outcomes: To enable the students to answer the following question.

Question: How do astronomers work out the length of

a):a year

b): a day

Answer a): a year :By measuring the time earth takes to travel around the sun.

_____
_____
_____
_____

_____
_____
_____
_____

b): a day: year :By measuring the time earth takes to spin on its axis.

_____
_____
_____
_____

_____
_____
_____
_____

Question: Describe the Sun

Answer: 1): Sun is star.

2)It is made up of hot gases.

3):It is in Centre of our solar system.

Question: What is revolution?

Answer: It is movement of earth around the sun.

Question: What is rotation?

Answer: It is movement of earth on its axis.

_____
_____
_____
_____

_____
_____
_____
_____

Date: 24th December,2020 Day:Thursday

Unit 11 The solar system

Topic: Day and night

Learning outcomes: To enable the students to answer the following question.

Question: Match column 1 to column 2

Earth orbit	**Facing away the sun**
Day	**Movement of earth around sun**
Night	**Facing the sun**
Revolution	**Sun**
Rotation	**Movement of earth on its axis**

Key words: 1(4) 2(3) 3(1) 4(2) 5(5)

Unit 11 The solar system

Topic: Day and night

Learning outcomes: To enable the students to answer the following question.

Question: Draw a diagram to explain how day and night are caused.

Answer: Because spinning movement of earth on its axis.

_____
_____
_____
_____

_____
_____
_____
_____