

NAME :- Mansha

CLASS :- B.ed 3rd Sem

ROLL No. :- 24114

SUBJECT :- Science

SUBMITTED To :- Rinkle Ma'am

SUBMITTED By :- Mansha

SCHOOL INTERNSHIP PROGRAMME FILE

Name Mansha S/o D/o Mr. Sumit Monga

College Roll No. 84114 University Roll No. 24060735 Teaching of Science

Certificate

Certified that Mr./Mrs./Miss Mansha S/o D/o Mr Sumit Monga

has delivered 5 Micro Lessons 40 Macro Lessons 8 Diary Form Lessons

ICT Based Lessons 5 Unit Test Based lessons 4

Teaching Model Based Lessons 3 Discussion Lesson 1

in School.

School Supervisor

College Supervisor

ਪ੍ਰਿੰਸੀਪਲ
ਸ਼੍ਰੀ (ਕੇ.) ਸੀਨੀਅਰ ਸੈਕੰਡਰੀ ਸਕੂਲ
ਗੁਰੂਹਰਸਾਹਿਬ (ਫਿਰੋਜ਼ਪੁਰ)

School Principal

Principal
Lala Jagat Narayan Education College
Jalalabad (W)

College Principal

Course Code : EPC-3-1
SEMESTER III
SCHOOL INTERNSHIP PROGRAMME

Assessment by concerned School : 40 Marks
Pedagogical Subject : 100 in each subject
External-100+Internal = 30+30

Total Marks : 300
Duration : 16 Week

16 Weeks internship shall be carried out in the three phases as described below:

Phase-1: Pre-Practice

Duration: 2 week (In parent institute)

1. Student teachers will learn to write micro, macro diary, ICT, test based and teaching model based lesson plans.
2. Every students teacher should go through simulated teaching practice in each teaching subject.
3. Workshop on development of audio visual aids be organized during this week.
4. Necessary orientation programs for mentor teachers and heads of the selected school be organized by the institute.

Phase-2: Teaching Practice

Duration:14 weeks

The school teaching practice phase can be divided into two blocks. In the first block if 7 weeks, student teachers may be engaged. with students of either Upper Primary or Secondary classes; and in the second block of 7 weeks in reverse order. With the permission of higher authorities (DGSE, DEO and school principals) the convenient small group of students teacher shall be attached to a school and he/she shall undertake such duties as are assigned to him / her by the Head Master/Principal of the school in all school related activities. During this period, he/she shall teach minimum of 61 lesson in each pedagogic subject under the supervision of the mentor teacher and respective teacher educators.

Nomination of Mentor Teachers': During the internship different teachers of the schools may be nominated as mentor teachers'.

The role of the mentor teacher would be to share his/her professional experiences, present model lessons, assess student teachers' performance, and provide on-site guidance and support during internship. **Identification of supervisors:** The faculty members of the parent institute would be allotted to different schools as supervisors during the internship period. The supervisors shall coordinate the activities of the mentor teachers of the school; and assess student teachers' performance, and provide on-site guidance and support during internship at least twice a week.

Activities for Student teachers: Student teachers shall undertake the following activities during this period:

Phase I. Planning and Facilitating Teaching Learning

(A) Preparing and delivering 120 lesson plans in two teaching subjects -(60+60)

Macro Lesson Plans-40

Diary form lesson Plans-08

ICT Based Lesson Plans-05

Unit Test Based Lesson Plans-04 (Preparing blue print & conducting unit tests)

Lesson plans based on Models of Teaching - 03

Discussion Lesson-1

(B) Peer teaching observation - 10+10 in each subject

Micro Lesson Plans-5+5 in each Subject, 10-15 pages with heading.

Phase II. Assessment of students' performance:

- * Assessment Record on the basis of unit test.

III. Participation in School Activities

- * Participation in organizing co-curricular activities i.e. Literary, Dramatics, Fine arts and sports (any two)
- * PTA/PTM/SMC

Records to be submitted by a Pupil teacher:

- * Teacher Practice file (Both teaching subject)
- * Assessment record
- * Record of Participation/organization of school activities.

*Phase-III

Post-Practice and Evaluation

Duration: 1 Week

The following activities shall be organized in the Post Practice phase

- * Presentation of brief report by each student teacher on his/her internship experiences.
- * Inviting feedback from cooperating schools.

*** Evaluation (Total - 300 marks)**

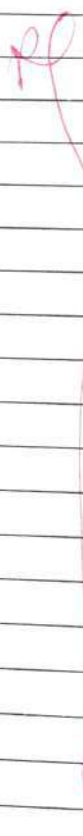
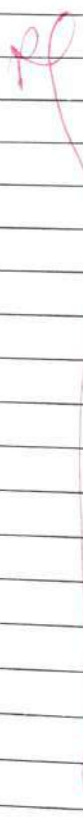
The weight age to different components of internship shall be assigned as under:-

- * Assessment by concerned teaching subject school mentor teacher and teacher educator - 40 marks (20+20 in each subject on assessment Performa- A)
- * Internal assessment on the basis submitted records-30 in each teaching subject (30+30 in each subject =60)
- * External assessment: Final Skill-in-Teaching lesson in each subject to be conducted in the parent college (100+100 in each subject = 200) under the supervision of external Internship Programme Coordinator appointed by the university:
- * Breakup of external evaluation for each teaching subject (100 marks) is as follows.
- * Written Lesson - 10Marks
- * Presentation - 60 Marks
- * Teacher Traits - 20 Marks
- * Teaching aids - 10 Marks

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Sr. No.	Particulars	Date	Page No.	Sig.
	<u>Micro lessons</u> :-			
		8-9-25	1-2	R
1.	changes around us	10-9-25	3-4	
2.	Physical and chemical change	13-9-25	4-5	
3.	Coal & petroleum	20-9-25	5-6	
4.	Is matter around us	22-9-25	6-7	
5.	Water a precious Resource			
	<u>Macro lessons</u> :-			
1.	Food where does it come from	8-9-25	1-9	R
2.	Components of food-	9-9-25	10-13	
3.	Conversion of animals & Plants.	10-9-25	14-16	
4.	Getting to know plants.	11-9-25	17-19	
5.	Nutrition in Plants.	12-9-25	20-22	
6.	Separation of substances	13-9-25	23-25	
7.	Respiration in organism.	15-9-25	26-28	
8.	Micro-organism.	16-9-25	29-31	
9.	Combustion & Flame	17-9-25	32-34	
10.	Nutrition in animals.	18-9-25	35-37	

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Sr. No.	Particulars	Date	Page No.	Sig.
11.	Force & Pressure.	19-9-25	38-41	
12.	Changes around us	20-9-25	42-44	
13.	Our Environment	22-9-25	45-47	
14.	Electricity	23-9-25	48-50	
15.	Acid & Bases	24-9-25	51-53	
16.	Friction	25-9-25	54-56	
17.	Some natural phenomena	26-9-25	57-59	
18.	Human Eye	27-9-25	60-62	
19.	Water	29-9-25	63-65	
20.	Gravitation.	30-9-25	66-68	
21.	Motion & its Types	1-10-25	69-71	
22.	States of Matter	2-10-25	72-74	
23.	Acid Rains	3-10-25	75-77	
24.	Acids	4-10-25	78-80	
25.	Movement in body	6-10-25	81-83	
26.	Water & its properties	7-10-25	84-86	
27.	Alkanes	8-10-25	87-89	
28.	Chemical Compounds	9-10-25	90-92	
29.	Lens & Mirrors	10-10-25	93-95	
30.	Speed.	13-10-25	96-98	

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Sr. No.	Particulars	Date	Page No.	Sig.
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32.	Metal & Non. metal	15-10-25	102-104	RS
33.	Synthetic Fibres & plastics	16-10-25	105-108	
34.	Heat	17-10-25	109-111	
35.	Pollution of Air & water	18-10-25	112-114	
36.	Cell- Structure & functions	20-10-25	115-118	
37.	Soil	21-10-25	119-122	
38.	Coal & petroleum	22-10-25	123-125	
39.	Light & shadow	23-10-25	126-129	
40.	Map production & Management	24-10-25	130-134	
	Diary form lessons.			
1.	State of Matter	1-11-25	1-3	L
2.	Magnet	3-11-25	4-6	
3.	Food- where does it comes from?	4-11-25	7-9	
4.	Heat	5-11-25	10-12	
5.	Force & pressure	6-11-25	13-15	
6.	Sound	7-11-25	16-18	
7.	Light	8-11-25	19-21	
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Sr. No.	Particulars	Date	Page No.	Sig.
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2.	Movement of body	12-11-25	5-8	
3.	Combustion	13-11-25	9-12	
4.	Windstorm	14-11-25	13-16	
5.	Sound	15-11-25	17-20	
	Unit Test Based lessons			
1.	Acid and Bases.	17-11-25	1-3	
2.	Balanced Diet.	18-11-25	4-6	
3.	Our environment.	19-11-25	7-9	
	Discussion lesson			
2.	Motion and its types	13-11-25	1-4	
	Teaching model Based.			
1.	Electricity	13-11-25	1-4	
2.	Human Eye	14-11-25	5-8	
3.	Force & its types	15-11-25	8-12	

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2 MACRO LESSONS	1 -147
3 DIARY FORM LESSONS	1- 24
4 ICT BASED LESSONS	1-16
5 UNIT TEST BASED LESSONS	1-10
6 DISCUSSION LESSON	1-4
7 TEACHING MODEL BASED LESSONS	1-12
8 OBSERVATION OF SCHOOL TEACHERS' LESSONS PEER TEACHING OBSERVATION	

TIME TABLE



	1	2	3	4	R E C E S S	5	6	7	8	9
Mon	Comp	Math	Pbi	Sci			Maths		Social Sci	
Tue	"	"	"	"		Comp	"	Physical Edu.	"	
Wed	"	"	Drawing	"		"	"	"	"	
Thu	Maths	Hindi	"	"		"	"	"	"	
Fri	"	"	Pbi	"		"	"	"	"	
Sat	"	"	"	"		"	"	"	"	

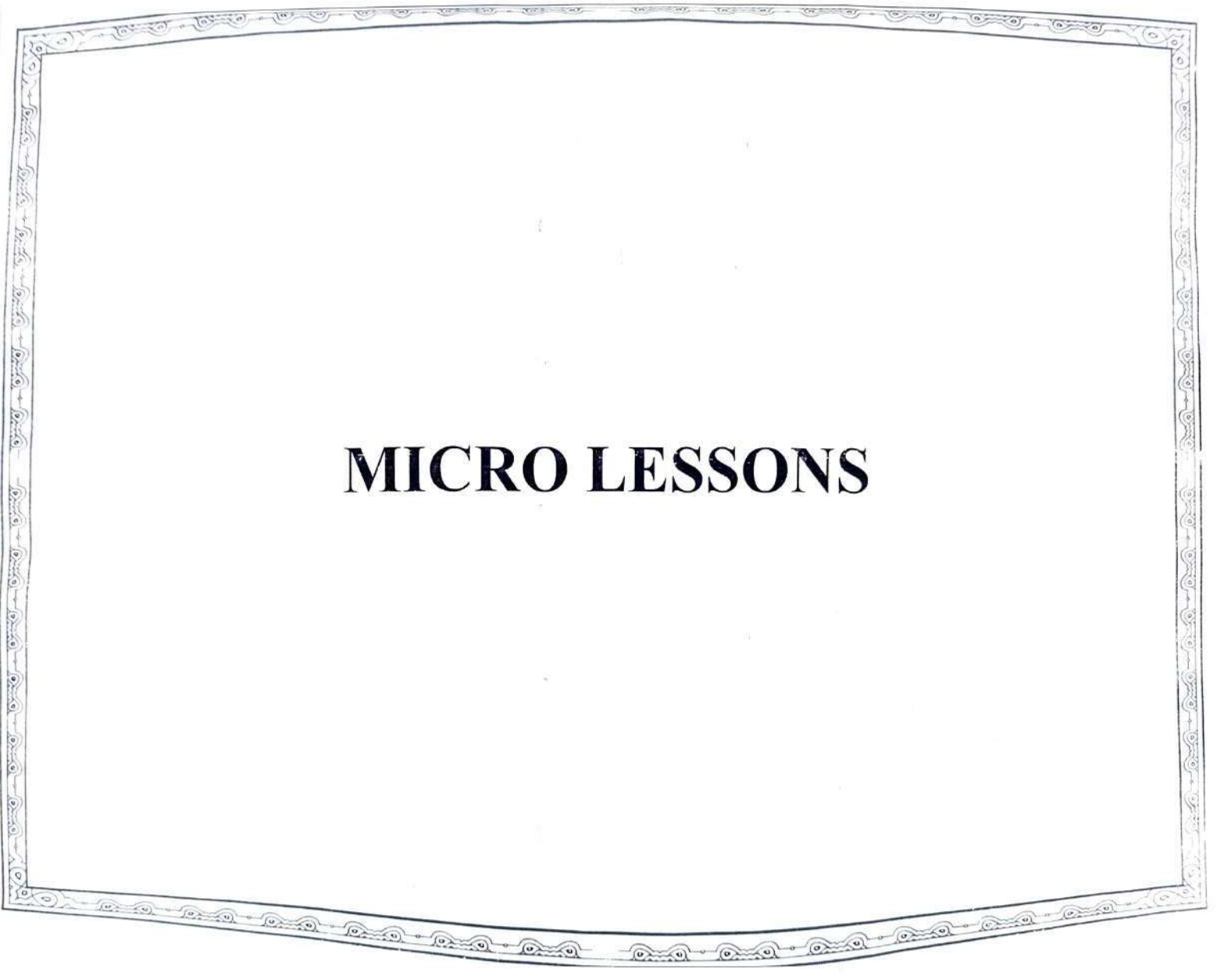
TIME TABLE

	1	2	3	4	R E C E S S	5	6	7	8	9
Mon	Maths	Pbc	Eng	Hindi		Comp- uter	Social Sci	Sci	Eng	
Tue	"	"	"	"		"	"	"	"	
Wed	"	"	"	"		"	"	"	Physical Edu.	
Thu	"	"	"	"		Drawing	"	"	"	
Fri	"	"	"	Maths		"	"	"	"	
Sat	"	"	"	"		"	"	"	Drawing	

ATTENDANCE CHART

Sr. No.	Name of Student	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.	17.	18.	19.	20.
1.	Kamini	P	*	P	P	*	P	*	P	P	Ab	*	*	P	P	P	Ab	Ab	P	*	*
2.	Gurpreet Kaur	P		Ab	P		P		P	P	P			P	P	P	P	Ab	P		
3.	Ravinder Rani	P		P	P		P		Ab	P	P			P	Ab	P	P	P	P		
4.	Navdeep Kaur	P	H	P	P		P	H	P	P	Ab			P	P	P	P	P	P		
5.	Palakdeep Kaur	Ab	T	P	P		P	T	P	P	P			P	P	P	Ab	P	A		
6.	Ritu Rani	P	Z	P	P		P	Z	P	P	P			P	Ab	P	P	P	P		
7.	Anjali	P	C	Ab	P		P	C	P	P	P	>		P	P	Ab	P	P	P		
8.	Amandeep Kaur	P	<	P	P		P	>	P	P	P	C		P	P	Ab	P	P	P		
9.	Manpreet Kaur	P	T	P	P	*	Ab	C	P	P	P	D	*	P	P	P	P	P	P	*	*
10.	Amalpreet Kaur	P	H	P	P	>	P	T	P	P	Ab	<	>	P	Ab	P	Ab	P	P	>	T
11.	Manjeet Kaur	P	>	Ab	P	C	P		P	P	P	D	C	P	P	P	P	P	P	C	L
12.	Manjot Singh	Ab	H	P	P	C	P	H	P	P	P	T	D	P	P	P	P	Ab	P	D	A
13.	Ranveer Singh	P	D	P	P	Z	P	<	Ab	P	P	C	Z	P	P	Ab	P	P	P	Z	3
14.	Harmandeep	P	A	P	P	D	Ab	H	P	P	P	S	D	P	P	Ab	P	P	P	D	T
15.	Mandeep Singh	P	Z	P	Ab	C	P	Z	P	P	Ab	T	S	Ab	P	Ab	Ab	P	P	C	D
16.	Navjot Singh	P	C	Ab	P	*	P	L	P	P	P	S	*	P	Ab	P	P	P	P	*	*
17.	Gurwinder Singh	P	C	P	P		P	C	Ab	P	P			P	P	P	P	P	Ab		
18.	Komalpreet Kaur	P		P	P		P	>	P	P	P			P	P	P	P	P	P		
19.	Jugraj Singh	P		P	Ab		P		P	P	P			Ab	P	P	P	P	Ab		
20.	Vikramjeet Singh	P	*	P	P	*	Ab	*	P	P	P	*	*	Ab	P	P	P	P	P	*	*

Signature & Stamp of School Principal

A decorative border with a repeating pattern of small, stylized floral or scroll motifs, enclosing the central text area.

MICRO LESSONS

PT Roll no. :- 2025101

Subject :- Science

Topic :- Changes around us

Date :-

Duration :- 15 min

Class :- 6th

Subject Matter	PT Activity	Pupil Activity
Well students today we will learn about diff. types of changes	PT will ask students to sit in discipline & see on blackboard.	Pupil are sitting properly in the class & looking on blackboard.
1. Slow change 2. Fast change 3. Periodic change 4. Non-periodic change 5. Physical change 6. Chemical change 7. Reversible change 8. Irreversible change	PT will write diff. types of changes on blackboard. PT will explain diff. types of changes & tell them how to use it in our daily life.	Pupil will see on B.B & note down types of changes. Pupil will listen carefully to teacher and understand it.

Practical Elements	Ranking
1) The Intro of lesson was attractive.	0, 1, 2, 3, 4, 5, 6
2) The teacher could keep fully concentration in the class.	0, 1, 2, 3, 4, 5, 6
3) The class was fully discipline.	0, 1, 2, 3, 4, 5, 6
4) The sound & voice of PT was audible to students	0, 1, 2, 3, 4, 5, 6
5) Praiseable words has been used	0, 1, 2, 3, 4, 5, 6

0 → Extremely poor
 1 → very poor
 2 → poor
 3 → average

4 → Good
 5 → very Good
 6 → Excellent

ALL

PT Roll no :- 2025101

Subject :- Science

Topic :- Physical & chemical change

Subject Matter

well students, today we will discuss about what is physical and chemical change

Physical change :-

- 1) Cutting of paper
- 2) Colour change
- 3) clay
- 4) crushing of chalk

Chemical change :-

1. Evolution of gas
2. Rusting of iron
3. Burning of incense sticks.

class :- 7th

date :-

duration :- 15 min

PT Activity

pupil teacher will say students to sit properly & listen carefully

PT will tell them about physical change & where it occurs.

PT will tell students about chemical changes with proper examples

Pupil Activity

pupil are sitting in discipline & listening to teacher.

pupil will listen carefully & understand the changes.

pupil will listen carefully & writing down the content from Black-board.

Practical Elements	Ranking
1. The Intro of lesson was attractive.	0, 1, 2, 3, 4, 5, 6
2. The teacher could keep fully concentration in the class.	0, 1, 2, 3, 4, 5, 6
3. The class was fully in discipline.	0, 1, 2, 3, 4, 5, 6
4. The sound & voice of PT was audible to students.	0, 1, 2, 3, 4, 5, 6
5. Praisable words have been used.	0, 1, 2, 3, 4, 5, 6

0 → Extremely poor

1 → Very poor

2 → poor

3 → Average

4 → Good

5 → Very Good

6 → Extremely Good

all

PT Roll no. B- 2025101

Subject B- Science

Class B- 8th

Topic B- Coal & petroleum

Date B-

Duration B- 15min

Subject Matter	PT Activity	Pupil Activity
Well students, today we will read about material used in our daily lives i.e Coal & petroleum <u>Coal</u> B- It is one of the cheapest fuel available. It is used to cook food.	Teacher will say students to sit properly and see on black board. PT will tell students about coal & its uses.	Pupil will sit properly in class. pupil will listen carefully and note down on their notebooks.
<u>Petroleum</u> B- It is dark coloured viscous, sticky mixture with a foul smell. It is produced in Kuwait.	PT will tell them about petroleum and where it is found.	pupil will note on their notebooks.

Practical Elements	Ranking
1. The intro of lesson was attractive	0, 1, 2, 3, 4, 5, 6
2. The Teacher could keep fully concentration in the class.	0, 1, 2, 3, 4, 5, 6
3. The class was fully in discipline	0, 1, 2, 3, 4, 5, 6
4. The sound & voice of PT was audible to students.	0, 1, 2, 3, 4, 5, 6
5. Praisable words have been used.	0, 1, 2, 3, 4, 5, 6

0 → Extremely poor
 1 → Very poor
 2 → poor
 3 → Average

4 → Good
 5 → very Good
 6 → Extremely Good.

200

PT Roll no 8- 2025101

Subject 8- Science

Topic 8- Is matter around us

Date 1-

Class 8- 9th

Duration 8- 15 min

Subject Matter	PT Activity	Pupil Activity
Well students today we will discuss about mixture of solution	PT will ask students to sit properly & listen carefully	Pupil were sitting properly & listen carefully.
<u>Mixture</u> 8- It contains two or more kind of pure form of matter	PT will teach students about mixture in brief	pupil will listening carefully to teacher.
<u>Types of mixture</u> :- we have different types of mixture:- (i) Homogeneous mixture (ii) Heterogeneous mixture.	PT will ask students to listen carefully and note down on their notebooks.	Pupil will open their notebooks and note the points.

Practical Elements	Ranking
1. The info of lesson was attractive	0, 1, 2, 3, 4, 5, 6
2. The Teacher could keep fully Concentration in the class.	0, 1, 2, 3, 4, 5, 6
3. The Class was fully in discipline	0, 1, 2, 3, 4, 5, 6
4. The sound & voice of PT was audible to students	0, 1, 2, 3, 4, 5, 6
5. Praiseable words have been used.	0, 1, 2, 3, 4, 5, 6

0 → Extremely poor

1 → very poor

2 → poor

3 → Average

4 → Good

5 → very Good

6 → extremely Good

Rev

PT Roll no P-2025101

Date :-

Subject :- Science

Class :- 7th

Topic :- Water a precious Resource

Duration :- 15 min

Subject Matter

PT Activity

Pupil Activity

Well students, today we will know why water is important for us.

PT will ask students to sit properly in class and listen carefully.

Pupils are sitting properly in class & listening carefully.

Water is one of the most imp. natural resource on earth. 71% of earth is covered with water.

PT will tell them the importance of water in our daily life.

pupil will understand the importance taught by teacher.

States of matter
Pure water is tasteless, colourless.

The solid state of water are ice, snow

PT will tell the students about states of water.

Pupil will listen carefully and note book on their notebooks.

Practical Elements	Ranking
1. The Intro of lesson was attractive	0, 1, 2, 3, 4, 5, 6
2. The Teacher could keep fully concentration in the class.	0, 1, 2, 3, 4, 5, 6
3. The class was fully in discipline	0, 1, 2, 3, 4, 5, 6
4. The sound & voice of P.T was audible to students	0, 1, 2, 3, 4, 5, 6
5. Praisable words have been used.	0, 1, 2, 3, 4, 5, 6

0 → Extremely Poor

1 → very poor

2 → Poor

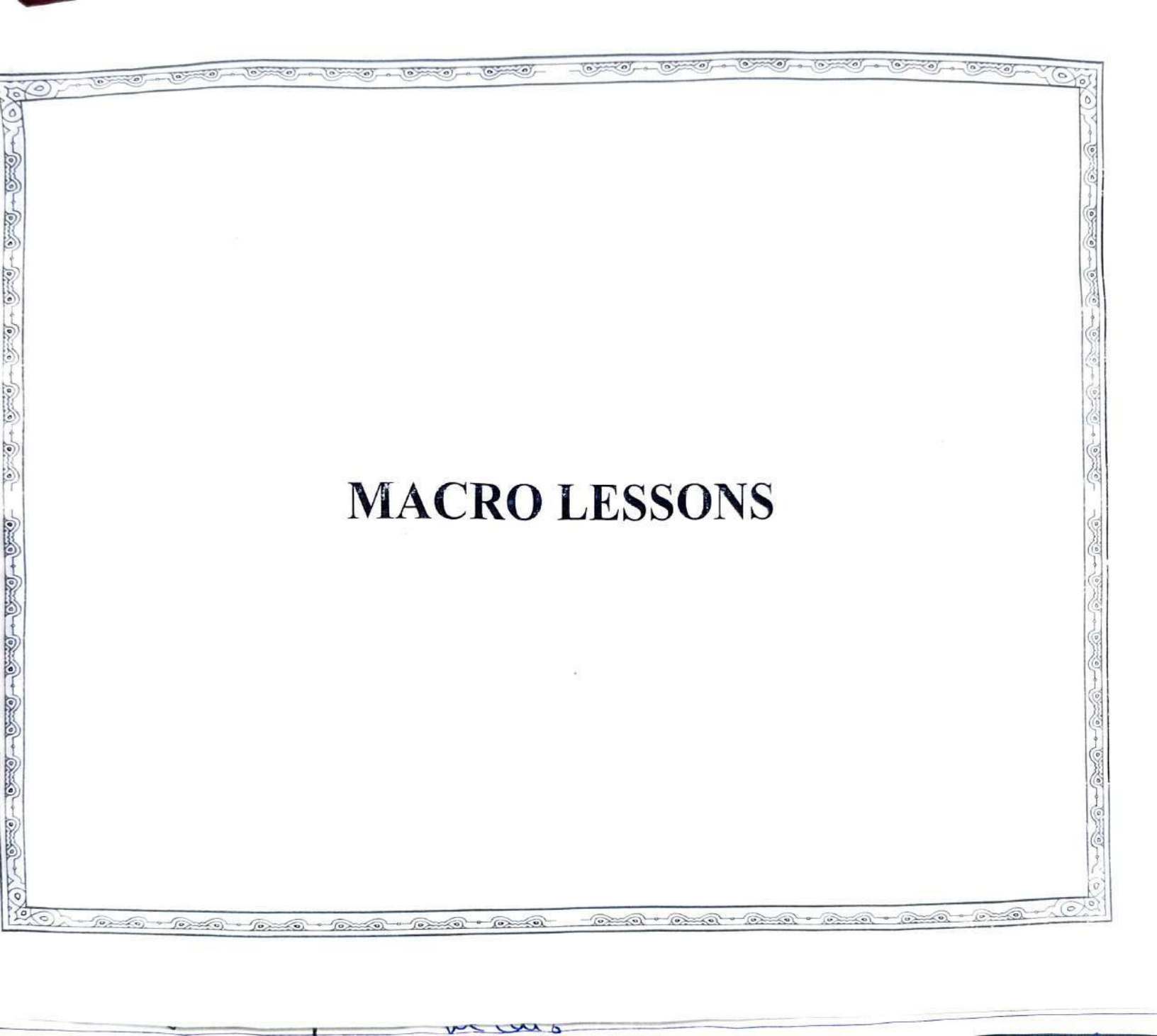
3 → Average

4 → Good

5 → Very Good

6 → Extremely Good.

OK



MACRO LESSONS

PT Roll No. → 2025101

Subject → Science

Topic → Food: where does it
comes from.

Date → 8-9-25

Class → 6th

Time → 40 min

Instructional
Objectives :-

At the end of the lesson an average people will
able to:- 1. Pupil will able to know source of food.
2. They will able to differentiate between different
source of food.

Illustrative Aids :-

Chart related to topic

Experimental Aids :-

A well equipped classroom, chalk, duster, pointer etc.

Previous Knowledge
Assumed :-

1. Student should know that food is essential for
living being. 2. They should aware about some
common food items like rice, milk etc.

P.K. Testing :-

Did you know from where we get the food
we eat?

Announcement of
Topic

So Students, let us start with our chapter
'food: where it comes from?'

Instructional &
Strategies

lecture cum demonstration method, explanation,
questioning Brainstorming, discussion will be used.

Subject Matter

Food:- food is needed by all organism
to survive.

Ingredients:- The items required to
prepare a dish is known as
Ingredients.

Different parts of plants provide
us different type of food

Example

- a) Green leafy vegetables are
obtained from the leaves
of the plant.

Pupil teacher Activity

pupil teacher will explain about
food & its importance.

P.T will explain the term ingredients
to students.

P.T will show flash cards
depicting plant source of
food & explain in detail
to students.

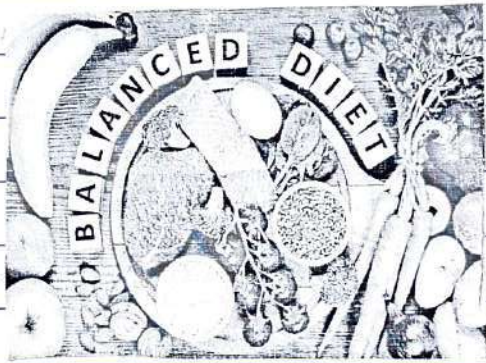
Expected pupil activity

Pupil will listen carefully & ask the questions if they have any doubt.

Pupil will clear their doubts Respectively

pupil will listen carefully & note-down on their note books properly.

Instructional Aids



Blackboard summary

Food :- Food is needed by all organism to survive

Food like :-
milk

Banana

Green leafy
vegetables
Whole grains.

Recapitulation :-

1. How food help us in daily life?
2. What was ingredients?
3. Which food do we get from plants?

Home Assignment :-

So students, you have to do very short type questions in your fair notebook. These questions we have covered in our today's topic.

RL

PT Roll no. :- 2025101

Subject :- Science

Topic :- Components of food

Class :- 6th

Time :- 40 min

Date :- 9-9-25

Instructional
Objective :-

At the end of the lesson an average pupil will be able to :-
• pupil will be able to distinguish various components of food & their benefits
• pupil will be able to understand how much energy we get from food we eat.

Illustrative Aids :-

Chart related to topic

Experimental Aids :-

A well equipped classroom, blackboard, chalk, duster, pointer etc.

Previous Knowledge
Assumed :-

"Students know that food is necessary for living beings and that different food like rice, milk, and fruits come from plants and animals"

P.K Testing :-

• Do you know which food give us more energy?

Announcement of
Topic

So students today we will read the Chapter components of food & understand its importance.

Instructional
Strategies:-

lecture cum demonstration method, Explanation, questioning, Brainstorming, discussion will be used.

Subject matter

Nutrients:- The substance which are needed for proper growth & development of human body are known as nutrients.

Component of foods:-

(i) fats (ii) Carbohydrates

(iii) Proteins (iv) minerals (v) Vitamins

Carbohydrates are provided by bajra, rice etc. Main source of protein are pulses & beans.

P.T. Activity

Teacher will properly explain about nutrients to students and maintain discipline in classroom.

P.T. will tell them about components of food.

P.T. will show flash cards related to source of different components of food.

Pupil Activity

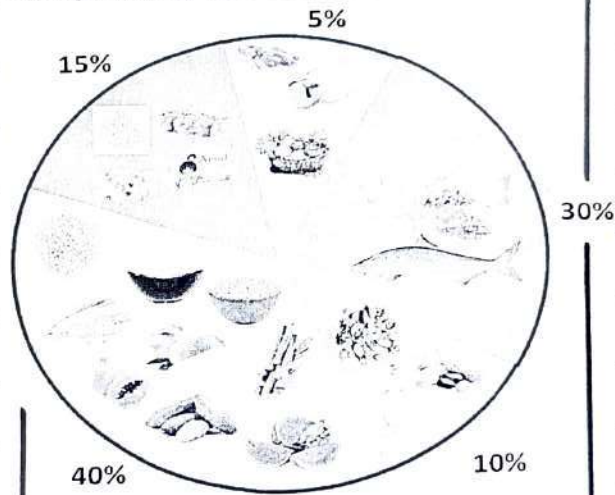
Pupil will sit properly & listen teacher carefully

Pupil will write down main points on their notebook

Pupil will listen carefully and write down on notebook.

Teaching Aids

THE MAJOR NUTRIENTS REQUIRED BY OUR BODY ARE:



☐ Protein

☐ Fat

☐ Carbohydrates

☐ Vitamins

☐ Minerals

Blackboard Summary

Components of food

- (i) Fats
- (ii) Carbohydrates
- (iii) Proteins
- (iv) Minerals
- (v) Vitamins

Recapitulation:-

1. what is the source of protein?
2. Name any two components of food?
3. Name any two food items containing carbohydrates?

Home assignments:- So students you have to read the chapter again at home and underline the important points.

✓

P.T Roll No:- 2025101

Subject:- Science

Topic:- Conservation of animals
and plants

Class:- 8th

Date:- 10-9-25

Duration:- 40 min

Instructional
Objectives

At the end of the lesson an average pupil will
able to:-

1. Pupil will able to know about their surrounding.
2. pupil will able to gain general knowledge.

Illustrative
Aids

A chart related to topic

Experimental Aids

A well equipped classroom, chalk, duster, pointer etc

Previous Knowledge
Assumed:-

"Students know about common animals and plants
in their surroundings and understand that
they are important for our environment."
Can you tell me about biotic components of
our ecosystem.

P.K Testing:-

Announcement
of topic :-

well students, after knowing about biotic components, now we will start our new chapter.

Instructional
Strategies :-

lecture cum demonstration method, explanation, questioning, Brainstorming, discussion will be used.

Subject matter

Deforestation :- Cutting of forest & using land for other purpose. Causes earthquake, drought, forest fire
Turning of forest covered land into deserts
Feb 2 is celebrated as world wetland day.

Black buck is found in Abohar ~~wild~~ wild life sanctuary.

P.T Activity

PT will ask students to sit in discipline.

PT will tell students about Deforestation & its causes.

PT will tell them about important dates of our environment.

PT will show them flash cards & chart related to it.

Pupil Activity

pupil are sitting properly & maintain discipline in classroom.

Pupil will clear their doubts respectively.

Pupil will listening carefully & note down on their notebooks properly.

Teaching Aids

World Wetlands Day

2 February 2025



Protecting wetlands
for our common future

Blackboard Summary

Topic :- Deforestation

↳ Means Cutting of forest

Feb 2 is celebrated as World wetland day.

Recapitulation 6-

1. What are causes of deforestation?
2. Where is Abohar Wildlife Sanctuary situated?
3. Name any two national parks of India.

Home Assignment So students tomorrow you have to do fill in the blanks, True/False and Matching on your fair notebooks.

Plc

PT Roll no. :- 2025101

Subject :- Science

Topic :- Getting to know plants

Class :- 6th

Duration :- 40 min

Date :- 11-9-25

Instructional
Objective

At the end of the lesson an average pupil will be able to :-

To know about the difference in colours of flowers, their structure, shape and heights.

Illustrative
Aids

Chart related to subject title.

Experimental
Aids

A well equipped classroom, Blackboard, chalk, duster, pointer etc.

Previous knowledge
Assumed

Students are already familiar with the basic parts of plants like roots, stems, leaves and flower.

P.K Testing

Can you tell me about the different types of flower & their structure.

Announcement
of Topic &

well students, now we will discuss about
our new chapter "getting to know plants".

Instructional
Strategies.

lecture cum demonstration method, explanation,
questioning, Brainstorming, discussion will be used.

Subject Matter

well do you know structure of
plants is divided into
two parts &

(i) Root system (ii) Shoot system

Plants are classified into
three parts &

(i) Herbs (ii) Shrubs (iii) Trees.

Herbs with weak stem are
called creepers.

wheat plant is a herb.

PT Activity

P.T will ask pupil to sit
quietly & open their books
to understand the chapter.

PT will tell pupil about the
parts of plant & how their
structure is divided.

PT will give some examples of
types of plants with charts
made by them.

Pupil Activity

pupil will open their books & sit properly in the class.

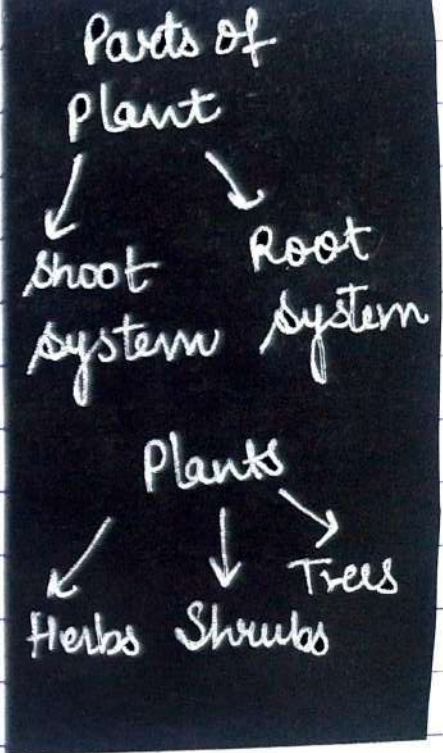
Pupil will listen teacher carefully and note down on their notebooks properly.

pupil will clear their doubts respectively.

Teaching Aids



Blackboard Summary



Recapitulation :- 1. In how many parts structure of plants have been classified.
2. What do you mean by herbs?
3. Give some examples of shrubs?

Home Assignment :- So students, tomorrow you have to learn back exercise and write it on your notebook of this chapter from your home.

ALL

P.T Roll no. :- 2025101

Subject :- Science

Topic :- Nutrition in plants

Class :- 7th

Duration :- 40 min

Date :- 15-9-25

Instructional
Objective :-

At the end of the lesson an average pupil will be able to :-

i) Pupil will be able to identify plant as

ii) Pupil will be able to write word equation

Illustrative aids :-

Chart related to topic

Experimental
aids :-

A well equipped classroom, black-board, chalk, duster, pointer

Previous knowledge
assumed :-

Students should be aware that plants prepare their own food with the process of photosynthesis

P.K. Testing :-

Students will be familiar with the photosynthesis

Announcement
of Topic

So students we will start our new chapter nutrition in plants.

Instructional
Strategies

lecture cum demonstration method, explanation, questioning, Brainstorming, discussion will be used.

Subject matter

Teacher will ask student to define photosynthesis.

The process by which a plant uses the energy from the light of sun to produce its own food.

Plants are first organism in every food chain.

Plants are autotrophs.

P.T Activity

P.T will ask students to sit properly in class and define the term photosynthesis.

Teacher will explain the term photosynthesis to students.

Teacher will show charts of various food chains and ask students about common features used in all.

Pupil Activity

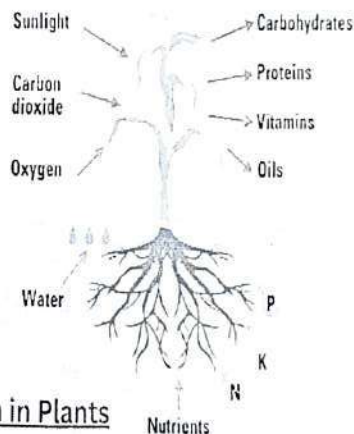
Pupil will open their books and start reading the chapter.

pupil will carefully listen the teacher and will underline the important points on their book.

Pupil will observe carefully and understand the term photosynthesis.

Teaching Aids

ARETHA KALOR



Nutrition in Plants

Blackboard Summary

Nutrition in plants

- Autotrophic organisms make their own food.
- Heterotrophic organism obtain food from other organism

Recapitulation :-

1. where does the synthesis of food in plants usually take place?
2. what is the ultimate source of energy for all living organism?
3. what is stomata?

Home Assignment :- So students tomorrow you have to find information about green house, how they raise plant from your home.

all

P.T Roll no :- 2025201
 Subject :- Science
 Topic :- Separation of Substance

Class :- 6th
 Duration :- 40min
 Date :-

Instructional Objectives :-

At the end of the lesson an average pupil will be able to

(i) To separate substances (ii) To help their family in separation

Illustrative Aids :-

A chart & flash cards related to topic

Experimental Aids :-

A well equipped classroom, blackboard, chalk, duster, pointer etc.

Previous Knowledge Assumed :-

They know that different material can be separated by hand.

P.K. Testing :-

Have you observed in market why vendor have separated different vegetables in 70 heaps.

Announcement of
topic :-

So students we will start our new
Chapter Separation of substances.

Instructional
Strategies

Lecture cum demonstration method,
Explanation, Brainstorming are used.

Subject matter

Separation :- Process of moving
something apart.

Threshing :- process of separation of
grains from stalks.

Hand-picking :- Method of separating
solid substance from
useful solids by hand.

Winnowing :- process of separating
grains from chaff.

These methods are use for
separation.

P.T. Activity

PT will ask students to
open their notebooks and
read the chapter.

PT will tell pupil about
what is separation & how
it is done.

PT will teach pupil about different
method of separation by showing
some useful picture on chart
to them.

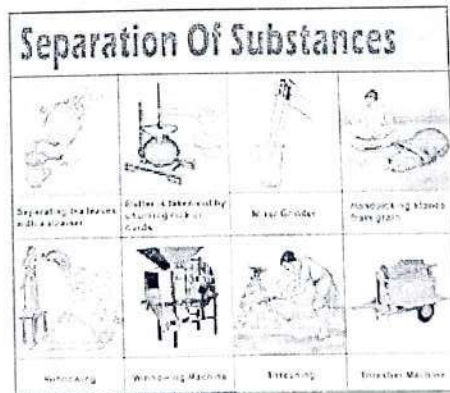
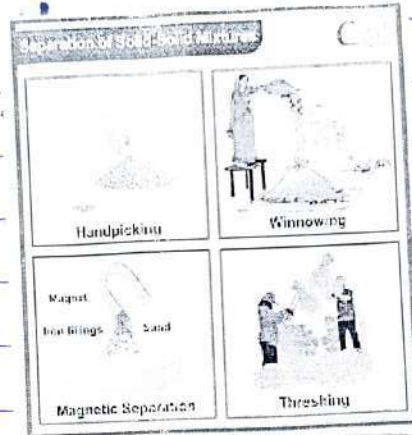
Pupil Activity

pupil were open their books and start reading the chapter.

pupil will carefully listen the teacher and will underline the important points on their book.

pupil will observe carefully & observe the various method of separation.

Teaching Aids



Blackboard - Summary

Separation of Substance

- Threshing
- Handpicking
- Winnowing
- Magnetic Separation

Recapitulation :-

1. What do you mean by separation?
2. Why separation is important.
3. What do you mean by threshing.
4. How hand picking is done.
5. What are various methods of separation?

Home Assignment :-

So students, tomorrow you have to write questions and answers on your notebook.

AB

P.T Roll no.- 2025101

Subject :- Science

Topic :- Respiration in organism.

Class :- 7th

Duration :- 40min

Date :-

Instructional Objectives :-

At the end of lesson an average pupil will be able to know about the respiration in organism.

Illustrative Aids :-

Chart related to Subject matter

Experimental Aids :-

A well equipped classroom, Black-board, Chalk, duster, pointer etc.

Previous knowledge Assumed :-

They have basic knowledge of body parts like nose & lungs. Breathing is essential for life.

P.K Testing :-

1. Can you tell me what is breathe?
2. Which part is involved in respiration?

<u>Announcement of Topic</u> :-	well students today we will discuss how respiration takes place in organism.
<u>Instructional Strategies</u> :-	lecture cum demonstration method, questioning, Brainstorming and discussion will be used.

<u>Subject matter</u>	<u>P.T. Activity</u>
There are some organism like yeast that can survive in the absence of air called anaerobic.	PT will tell the student. The organism are made up of cells that perform different functions.
<u>Breathing</u> :- It means taking in O_2 and giving out CO_2 . The taking in of O_2 is called Inhalation and giving out CO_2 is called Exhalation. It is continuous process.	PT will tell students to take a deep breathe. PT will ask question "what we get in". yes, we take in O_2 which is called Inhalation

Pupil Activity

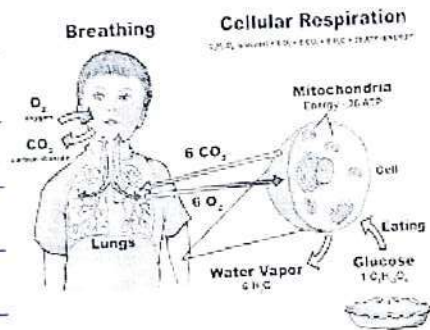
Pupil will be able to know about function of muscles.

pupil will listen carefully to teacher.

pupil will be able to recall the breathe and the breathing rate.

Pupil will observe carefully.

Teaching Aids



Blackboard Summary

Respiration is the essential process by which all living organism break down food to release the energy needed for survival & daily function.

Recapitulation b- 1. which contain more oxygen inhaled air or exhaled air?
2. what is gaseous exchange?
3. what happens in your lungs?

Home Assignment b- So students you have to make a model of human respiratory system to show mechanism of breathing.

OK

PT Roll no. :- 2025101

Subject :- Science

Topic :- Micro-organism

Class :- 8th

Duration :- 40 min

Date :-

Instructional
Objectives :-

At the end of lesson an average pupil will be able to tell about micro-organisms that we can't see without microscope.

Illustrative
Aids :-

Chart related to subject matter.

Experimental Aids :-

Classroom, Blackboard, microscope, glass slide, prepared slides, dropper.

Previous Knowledge
Assumed :-

Students have seen spoiled bread or food items at home. Students know that living things grow.

PK Testing :-

Do you know when bread is kept for long time green colour is seen in it. What is it?

Announcement of
Topic :-

So students, today we will know about small micro-organism around us.

Instructional
Strategies :-

lecture cum demonstration method, discussion, Brainstorming will be used.

Subject Matter

There are 4 major group of micro-organisms:-

- Bacteria
- Protozoa
- Fungi
- ~~Alag~~ Algae

Some organism are harmful and causes disease called pathogens.

Micro organism play a role in food industry.

P.T Activity

P.T will ask students to sit properly and listen carefully.

P.T will tell them about types of micro-organism.

P.T will ask students about major groups of micro-organisms.

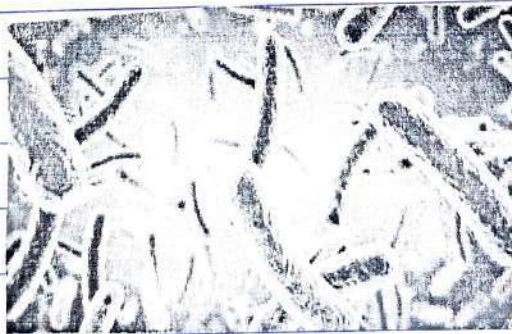
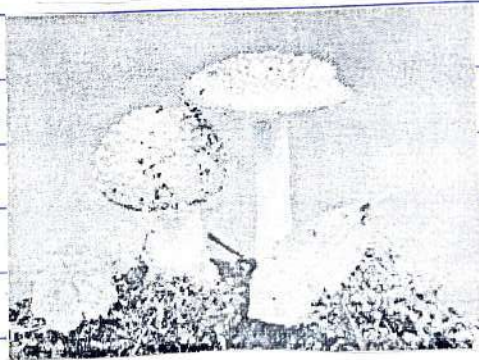
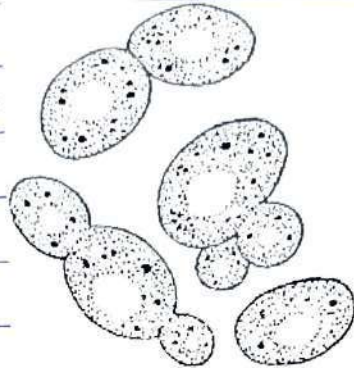
Pupil Activity

Pupil are listening carefully to teacher.

Pupil will be able to know about different groups of micro-organism.

Pupil will be able to know about the role of micro-organism.

Teaching Aids



Blackboard Summary

-ny &

Micro-organism

- Bacteria
- Protozoa
- Fungi
- Algae

Recapitulation :-

1. what are major groups of micro-organism?
2. what is the role of micro-organisms in Industry?
3. what do you mean by pathogens?

Home Assignment :-

Draw the shapes of different types of bacteria on your fair notebook.

all

PT Roll no. & 2025101

Subject :- Science

Topic :- Combustion & Flame

Class :- 8th

Duration :- 40 min

Date :-

Instructional
Objectives :-

At the end of lesson an average pupil will be able to tell the importance of combustion and flame. and understand harmful effects of food.

Illustrative
Aids :-

Chart related to subject title.

Experimental Aids :-

Candle burning experiment, Matchstick demonstration.

Previous Knowledge
Assumed :-

Students know about heating and basic fire concept.

P.K Testing :-

1. Name a few fuels used in our homes?
2. What is full form of LPG?

Announcement of
Topic :-

So today, we will study about
• Combustion and flame.

Instructional
Strategies :-

lecture cum demonstration, discussion
Brainstroming etc are used.

Subject matter

P.T Activity

Combustion :- A chemical process
in which a substance
reacts with oxygen to give
off heat.

P.T will tell them about
Combustion by giving them
example.

Fuel :- The substance which
undergo Combustion is
called fuel.

PT will tell them about
fuel and its uses.

Ignition temperature :- The
lowest min. temp.
at which a substance catches
fire

PT will explain them
about ignition temp.

Pupil Activity

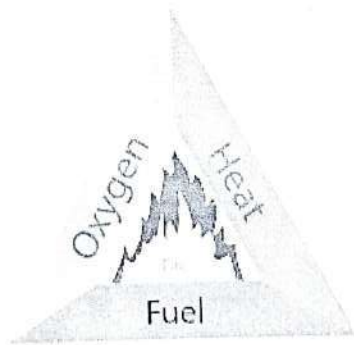
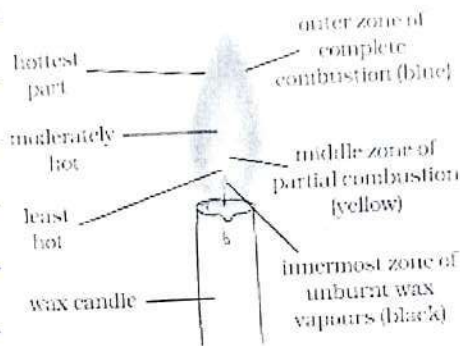
Pupil will listen carefully to teacher.

pupil will understand the topic "Combustion and flame".

pupil will listen carefully.

pupil will clear their doubt respectively.

Teaching Aids



Blackboard Summary

Condition for Combustion

1. Fuel
2. Oxygen (supporter)
3. Heat (To reach ignition Temperature)

Types :-

- Rapid
- slow
- spontaneous

Recapitulations- 1. what do you mean by fuel & combustion?

2. which part of flame is hottest?

3. which gas is used in combustion?

4. The min temp. at which a substance catches fire is known as?

Home Assignments:- Draw a labelled diagram showing different parts of candle flame.

RLC

PT Roll no. 8-2025101

Subject & Science

Topic 8- Nutrition in Animals

Class 8- 7th

Duration:- 40 min

Date 8-

Instructional
Objective :-

At the end of the lesson an average pupil will be able to understand different modes of nutrition in animals. To relate nutrition process with daily life examples.

Illustrative Aids:-

Charts related to subject matter like digestive system.

Experimental Aids:-

Model of human digestive system.

Simple demo with bread / sugar solution to show digestion by saliva.

Previous Knowledge
Assumed :-

Students already know about nutrition in animals. Students know that food gives energy.

P.K Testing :-

You have read about how plants take nutrition. Can you know how animals take nutrition.

Announcement of
Topic :-

So students today we will learn about different food habits of animals.

Instructional &
Strategies

lecture cum demonstration method, explanation, questioning, Brainstorming, discussion will be used.

Subject Matter

P.T Activity

On the basis of food habits animals are classified into three categories

1. Herbivores

2. Carnivores

3. Omnivores

Modes of Nutrition :- Three types of modes of nutrition

(i) Saprophytic nutrition

(ii) Parasitic nutrition

(iii) Holozonic nutrition

PT will tell students about types of food habits in which animals are classified.

PT will explain them about different food habits.

PT will tell them about three types of mode of nutrition and tell them to note down on their notebooks.

Pupil activity

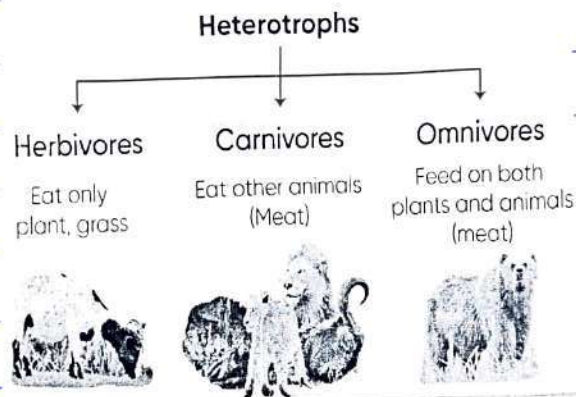
Pupil will listen to teacher carefully & learn about types of animals classified on the basis of their food habits.

Pupil will open their notebook

Pupil will write on their notebooks properly.

Teaching aids

HERBIVORES, CARNIVORES, OMNIVORES



Blackboard Summary

Topic :- Nutrition in Animals

(i) Saprophytic nutrition

(ii) Parasitic nutrition

(iii) Holozoic nutrition

Recapitulation :-

1. How many types of nutrition are there?
2. What do you mean by holozonic mode of nutrition?

Home Assignment :- you have to prepare a chart on different with types of modes of nutrition with their examples from your home.

✓
All

P.T Roll no. 2023101

Subject :- Science

Topic :- Force & pressure

Class :- 8th

Duration :- 40 min.

Date :-

Instructional Objectives :-

At the end of the lesson an average pupil will be able to understand :- (i) The concept of force and its effect (ii) To explain pressure and factors affecting it.

Illustrative Aids :-

→ charts showing examples of force and pressure.
→ Diagrams (force applied, area effect)
→ Balloons, pins, brick for demo.

Experimental Aids :-

• Balloon, Syringe without needle (to show pressure transmission), Book on desk (force applied by gravity).

Previous knowledge Assumed :-

• Students already know about push and pull.
• Students have seen examples like hammering a nail.

P.T. Testing :-

1. What happens when you push a chair?
2. Why do we use a knife to cut fruits?

Announcement of Topic :-

So students, let's start our chapter force and pressure.

Instructional Strategies

lec cum demonstration method, questioning, Brainstorming and discussion will be used.

Subject matter

P.T Activity

Any push or pull which acts on a body which either generates motion in it or stops is called force. i.e. pushing a box, pulling a box.

Types of forces :-

1. Contact force

2. Non-contact force

Force per unit area is known as pressure.

P.T will ask students to sit properly in class.

P.T will teach student about topic force with examples.

P.T will tell students about two types of forces.

P.T will tell them about relation between force and pressure.

Pupil activity

pupil will sit properly in the class.

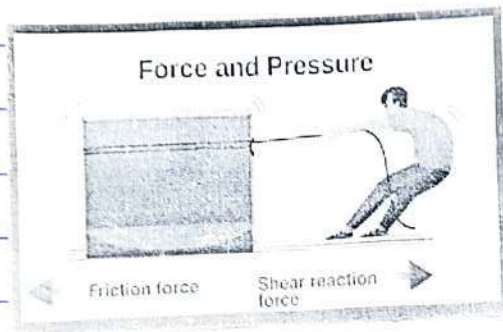
pupil will listen to teacher carefully.

pupil will understand the topic carefully.

pupil will clear their doubts respectively.

pupil will write types of forces on their notebooks.

Teaching aids



Blackboard summary

Force :- A push or pull on an object

Types :- (i) Contact

(ii) Non-Contact

Pressure :- It is force acting per unit area

$$\text{Pressure} = \frac{\text{Force}}{\text{Area}}$$

Recapitulation :-

1. What do you mean by force?
2. Give relation between force and pressure?
3. How many types of forces are there?

Home Assignment :-

So students you have to prepare any activity to show that air exerts pressure on your notebooks.

✓

PT Roll no B- 2025101

Subject B- Science

Topic B- changes around us

Class B- 6th

Duration B- 40 min

Date B-

Instructional Objectives B-

At the end of the lesson an average pupil will able to understand differentiate between reversible and irreversible changes

Illustrative Aids B

Charts showing example of physical and chemical changes. Pictures of rusting iron, melting ice, burning paper.

Experimental Aids B-

- Ice cube (to show melting and freezing)
- Candle & matchbox (to show Burning)
- Iron nail to show rusting

Previous Knowledge Assumed B-

- Students have seen changes in their surroundings
- They know ice melts into water.
- They have observed burning of paper.

P.K. Testing B-

1. what happens when ice is kept in sunlight?
2. Have you seen sugar dissolving in water?

Announcement of Topic :-

well students, today we will study about "Changes around us".

Instructional Strategies :-

Recum demonstration method, questioning, Brainstorming and discussion will be used.

Subject Matter

Many changes are taking place around us on their own.

Eg:- (i) Crops in the fields change time.

(ii) leaves fall from trees.

Types of changes :-

(i) Reversible change

(ii) ~~leaves~~ Irreversible change.

(i) The change which will re-attain their original shape & size after release of force are Reversible changes

Eg:- Stretching of Rubber

P.T Activity

PT will introduce the topic by giving example of changes occurring around us.

PT will ask one student to stand & perform activity.

PT will ask student to stretch rubber band

PT will explain activity to students.

Pupil Activity

pupil will listen carefully to teacher.

pupil will observe the activity carefully.

pupil will observe the stretching of rubber carefully.

Teaching Aids

Reversible and Irreversible Changes



Blackboard Summary

Types of changes

1. Physical change
2. chemical change

Other Types of changes

- slow & fast changes
- Periodic & Non periodic change

Recapitulation :-

1. what do you mean by reversible change?
2. explain irreversible change with suitable example.

Home Assignment :-

Paste 5 photos of reversible & irreversible change on your notebook

RLO

PT Roll no.:- 2025101

Subject:- Science

Topic:- Our Environment

Class:-

Date:-

Instructional
objectives:-

By the end of the lesson, students will be able to:-

1. Define the term Environment.

2. Differentiate between biotic and abiotic components.

Illustrative
Aids:-

1. Charts showing biotic and abiotic components.

2. Flash cards of living and non-living things.

3. Smartboard for short video on pollution.

Experimental
Aids:-

1. Demonstration of air and water pollution using simple experiments.

2. Display of waste segregation.

Previous knowledge
Assumed

Students have basic knowledge of living and non-living things and their surroundings.

P.K Testing:-

1. What do you mean by surroundings?

2. Name two living and two non-living components?

Announcement of
Topic :-

Well students, today we will study about
"Our Environment".

Instructional
Strategies :-

lecture demonstration method, questioning,
Brainstorming, discussion will be used.

Subject Matter

PT Activity

Eco system :- All the interacting
organism like plants,
animals, micro-organism & human
being in an area together with
non-living forms on eco-system.

Eg :- Garden is an eco-system.

Ecosystem consist of consumers,
producers & decomposers.

Example :- lion, fudge, plants

PT will explain the students
about eco-system by giving
them some examples.

PT will show some flash
cards related to it.

pupil Teacher will differentiate
categories in which
eco-system is divided with
examples

Pupil Activity

Pupil will listen carefully and write the definition of their notebooks.

Students will observe the teacher carefully.

Students will listen carefully and write the categories on their notebooks with examples.

Teaching Aids



Black-board Summary

Environment means Everything that surrounds us and affects our life

Components of Env.

(i) Biotic Components

(ii) Abiotic Components

Recapitulation :- what do you mean by ecosystem?
give two examples of each :-

- (i) producers
- (ii) consumers
- (iii) Decomposers.

Home Assignment :- write about eco-system on your notebook and about food chain with examples.

✓
OK

PT Roll no:- 2025101
Subject :- Science
Topic :- Electricity

Class :- 9th

Date :-

Time :- 40 min

Instructional
Objectives :-

After the lesson, student will be able to -
i) Define electricity. ii) Identify conductors and insulators. iii) Explain the working of electric circuit

Illustrative
Aids :-

- Chart of electric current.
- Real material (cell, wire, bulb, switch)
- Black board & Chalk

Experimental
Aids :-

→ Dry cell, Electric bulb, Connecting wires, Switch or Safety pin

Previous
Knowledge :-
Assumed

Students have basic knowledge about light and its source.

P.K Testing :-

1. Have you seen bulbs glowing at home?
2. From where do we get electricity?

Announcement of
Topic :-

well students, today we will study about topic "Electricity"

Instructional
Strategies :-

sec cum demonstration method, questioning, demonstration and discussion will be used

Subject matter

P.T Activity

Electric Circuit :- A continuous and closed path of an electric current is called an electric circuit.

Pupil teacher will explain the pupil about electric circuit by giving an example of switch board.

Electric Current :- It is expressed by the amount of charge flowing through a particular area in a unit time. It is denoted by I .

Pupil Teacher will explain the concept of electric circuit to students.

$$I = Q/T$$

S.I unit of electric current is Ampere (A)

P.T will tell the formula and units of electric current to students.

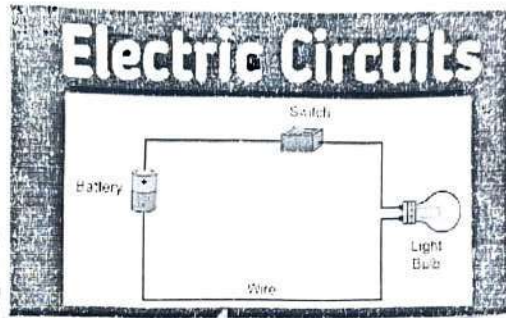
Pupil Activity

Students will listen carefully & write the definitions on their notebooks properly.

Pupil will try to understand the concept of electric current and note in their notebook.

pupil will clear their doubts respectively.

Teaching Aids



Black-board Summary

Electricity

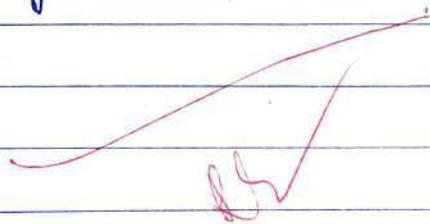
It is form of energy that can produce light, heat and motion

Sources &

- Natural source:-
lightning
- Man-Made source
Batteries

- Recapitulation :-
1. what is electric current?
 2. write formula of electric current?
 3. write S.I unit of following
 - (i) charge.
 - (ii) current.

Home Assignment :- so students you have to draw the diagram of electric circuit in your notebook.



PT Roll no. :- 2025101
 Subject :- Science
 Topic :- Acid & Bases

Class :- 7th

Date :-

Duration :- 40 min

Instructional
Objectives :-

After the lesson, students will be able to -

1. Define acids and bases.

2. Identify common acids and bases used in daily life

• Chart showing examples of acids & bases

• Litmus paper (Red & blue)

• Picture of PH scale.

Illustrative
Aids :-

→ lemon juice, baking soda solution, vinegar, soap solution.

→ Test Tubes and Droppers

Experimental
Aids :-

Previous
Knowledge :-
Assumed

• Students have knowledge about different substances used at home. They can identify the materials by their taste and touch

Pre Testing :-

1. Have you tasted lemon juice or vinegar?
 2. How does it taste?

Announcement of Topic 8-

Today we are going to study a very interesting topic - "Acids and Bases".

Instructional Strategies 8-

Recum demonstration methods, questioning, Brainstorming and discussion method will be used.

Subject Matter

PT Activity

Acids:- The word acid comes from a latin word aest which means 'sour'

Eg:- Acid, lemon.

Bases:- Bases are the substances which are bitter in taste and feel soapy in touch.

Eg:- Baking Soda, Soap.

PT will explain about acidic nature of substances by giving examples.

PT will open their notebooks and write definitions on their note books.

pupil will listen carefully.

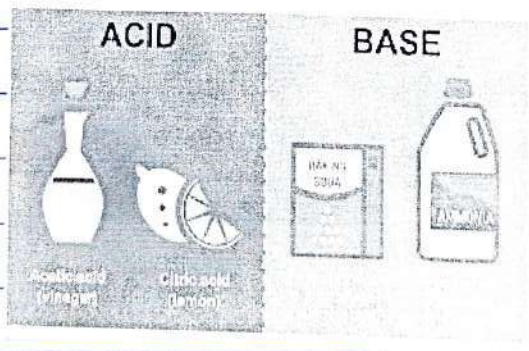
Pupil Activity

Student will listen carefully to the teachers.
pupil will open their notebooks and write definitions on their notebooks.

pupil will listen carefully to teachers.

pupil are writing on their notebook

Teaching Aids



Blackboard Summary

Acids :- substances that have a sour taste and turn blue litmus Red.
Eg:- lemon juice, curd.

Bases :- substances that have bitter taste, are soapy to touch, & turn red litmus blue Eg:- Soap.

Recapitulation :-

- give some examples of acids & bases.
- lemon contains _____ acid.
- Orange contains _____ acid
- what do you know about bases.

Home Assignment :-

So you have to write the differences between acids & bases on your notebooks with suitable examples.

file

PT Roll no :- 2025101

Subject :- Science.

Topic :- Friction

Class :- 8th

Date :-

Duration :- 40 min

Instructional Objectives :-

After the lesson, Students will be able to :-

1. Define friction and Explain its causes.
2. Identify different types of friction.

Illustrative Aids :-

→ charts showing types of friction
→ Diagram of forces acting on moving object.

Experimental Aids :-

→ wooden Block, Spring balance.
→ Chalk and duster to show friction between solid surface.

Previous Knowledge Assumed :-

Students already know :-
The concept of force and motion

PK Testing :-

1. What is force?
2. Why does a ball stop rolling after some time?
3. Can an object move without applying force?

Announcement of Topic :- Today we are going to study about a very interesting topic "Friction".

Instructional Strategies :- In cum demonstration method, questioning, discussion will be used.

Subject matter

Friction :- Force of friction is always opposite to applied force.

Types of Friction :-

(i) Static Friction

(ii) Sliding Friction

(iii) Rolling Friction

Static friction > Sliding friction > Rolling Friction
Advantages :- Enable us to walk and Run

Disadvantage :- Causes wear and tear

PT Activity

PT will tell students about friction & its causes.

PT will tell students about different types of friction.

PT will tell students about advantages of friction

PT will tell students about disadvantages of friction.

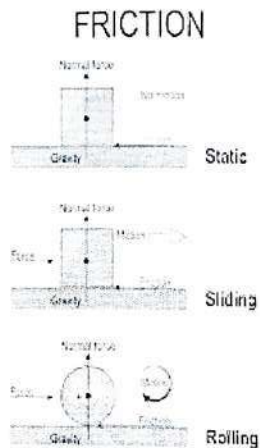
Pupil Activity

Pupil listens carefully to teacher.

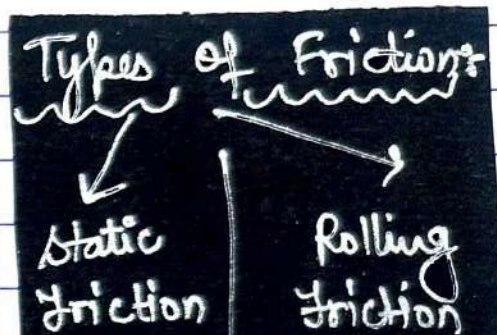
Students will open their notebooks and write definition of friction and its types on it.

Students will listen teacher carefully & understand the topic carefully.

Teaching Aids



Blackboard Summary



Sliding Friction

Effects of Friction

- Helps us walk, write
- Enables objects to stop when needed

Recapitulation &

1. What is frictional force?
2. How many types of friction are there?
3. Write advantages and disadvantages of friction?

Home Assignment & So students you have to write differences between types of friction on your notebooks.

OK

PT Roll no :- 2025101

Subject :- Science

Topic :- Some natural phenomena

Class :- 9th

Date :-

Duration :- 40 min

Instructional Objectives :-

After the lesson, students will be able to :-

1. Define natural phenomena such as lightning
2. Explain how lightning occurs due to charge transfer.

Illustrative Aids :-

- Charge showing formation of lightning.
- Diagram of earth's layers

Experimental Aids :-

Electroscope to show charging by rubbing.
Simple pendulum to show vibration similar to earthquake tremors.

Previous Knowledge Assumed :-

Students already know:

1. The concept of electric charge.
2. Natural events like rain, thunder & wind occur due to natural processes.

PK Testing :-

- Have you ever seen lightning during a storm?
- What sound do you hear after lightning?

Announcement of <u>Topic</u> :-	Today we are going to study about a topic "Some natural phenomena".
Instructional <u>Strategies</u> :-	Lec cum demonstration, Discussion, questioning & Brainstorming will be used.

Subject matter

Epidemic :- Rapid spread of
disease among large
no. of people.

Pandemic :- A disease that
spreads over a large
area of many countries
Eg:- Virus

Winds :- Air in motion is
called wind

Storm :- When the speed of
Air is more than 100 km/h
it is called storm.

PT Activity

Pupil teacher will
explain students about
some natural phenomena

Pupil teacher will tell students
about epidemic & pandemic
with examples.

pupil teacher will tell
students about wind and
storm and tell them about
speed of storm.

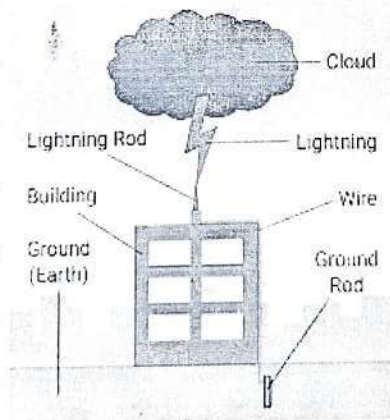
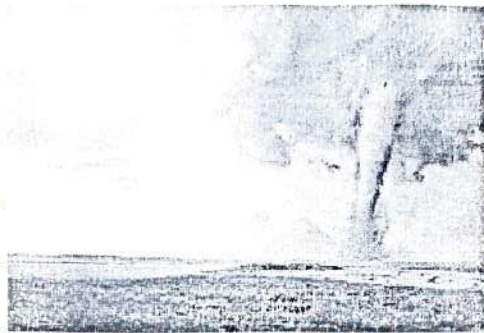
Pupil Activity

Pupil will listen to the teacher carefully.

pupil will understand the topic & write on their notebooks

Pupil are listening to teacher carefully.

Teaching Aids



Blackboard Summary

Natural phenomena are events that occur naturally in our environment. like lightning and Earthquakes

Safety during lightning

- Stay indoors.
- Avoid metal objects and tall trees
- Do not use wired phones.

Recapitulation &

1. give two examples of each
 (ii) Epidemic
 (iii) pandemic
2. what is difference between epidemic & pandemic
3. what is speed of air in storm.

Home Assignment &

Make a project on natural phenomena's that take place in the world.

RR ✓

PT. Roll no :- 2025101

Subject :- Science

Topic :- Human eye.

Class :- 10th

Date :-

Duration :- 40 min

Instructional Objectives :-

After the lesson students will be able to

- (i) Identify the parts of human eye.
- (ii) How image formation occur in the eye.

Illustrative Aids :-

→ chart / model of human eye.
→ Diagram on blackboard.
→ Smartboard / ppt.

Experimental Aids :-

Simple lens
or magnifying glass to demonstrate focusing of light.

Previous Knowledge Assumed :-

- Students already know about sense organ.
- Students have Basic knowledge of Reflection and Refraction of light.

PK Testing :-

- what is function of light in seeing things?
- which organ help us to see objects around us?

Announcement of Topic :-

Today, we are going to study about the Human eye - "its structure and defects of vision"

Instructional Strategies

lecture demonstration method, questioning and discussion will be used.

Subject Matter

PT Activity

Human eye is one of the most valuable and sensitive sense organ. It enable us to see around us.

PT will explain about Human eye to students.

Structure of Human eye :-

- | | |
|-------------|--------------------|
| 1. Cornea | 5. Ciliary muscles |
| 2. Iris | 6. Retina |
| 3. Eye lens | 7. Optic nerve |
| 4. Pupil | |

PT will explain the structure of human eye with the help of chart & drawing the diagram related to it on board.

Defects of vision :-

1. Myopia
2. Hypermyopia
3. Presbyopia

PT will explain about all defects of vision.

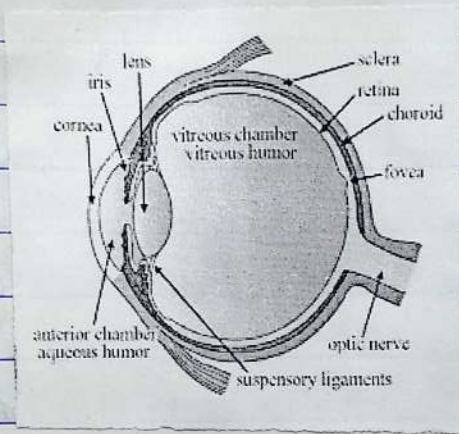
Pupil Activity

Pupil will listen to teacher carefully.

pupil will draw a labelled diagram of human eye on their notebook

Pupil will clear their doubts respectively.

Teaching Aids



Black-board Summary

Human Eye

It is a sense organ that enables us to see the world around us.

Structure of Eye

- Cornea
- Iris
- Pupil
- Lens
- Retina
- Optic nerve
- Ciliary muscles.

Recapitulation :-

1. what do you understand by Human eye?
2. what are defects of vision
3. explain
 - (i) Cornea
 - (ii) Retina.

Home Assignment :-

Draw a well labelled diagram of Human eye on your fair notebook and explain about their parts

PS

PT Roll no. 8-2025101

Subject 8- Science

Topic 8- water

Class 8- 8th

Date :-

Duration :- 40min

Instructional
Objectives :-

After the lesson students will be able to :-
Explain the importance of water and describe the source and forms of water.

Illustrative Aids :-

Chart, Diagram of source of water, Picture of water use in daily life.

Experimental
Aids :-

- Glass of water + Spoon + Salt (to show dissolving)
- Filter paper to show water purification

Previous Knowledge
Assumed :-

Students should already know about

(i) water is a liquid

(ii) water exists in three forms - solid, liquid, gas.

Pk Testing :-

1. Why do we need water?
2. From where do we get water?
3. Can water change its form?

Announcement of
Topic :-

Today we are going to study about the topic - "Water".

Instructional
Strategies

Lesson demonstration, questioning and discussion will be used.

Subject matter

Importance of water & water is most precious source on the earth. All living beings need water.

- | | |
|-----------|----------|
| a) Oceans | d) ponds |
| b) Rivers | e) Dams |
| c) Seas | f) Rain |

uses of water :-

- Drinking
- washing
- Cleaning
- watering plants.

PT Activity

PT will explain students about importance of water.

PT will tell students about different sources of water.

PT will tell students about uses of water in our daily life.

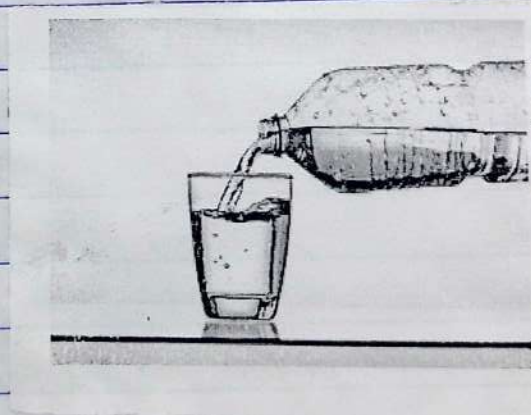
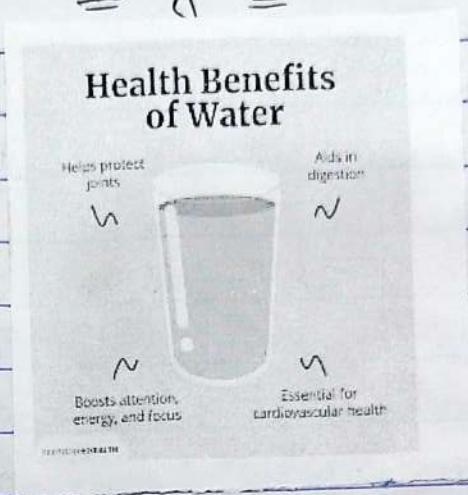
Pupil Activity

pupil will listen teacher carefully and write it on notebook.

pupil will understand and know about sources of water.

pupil will listen carefully.

Teaching Aids



Blackboard Summary

Importance of water

- water is essential for all living organisms.
- used for drinking, cooking, washing etc.
- Makes up about 70% of the Earth's surface & 70% of our body.

Recapitulation :-

1. What are uses of water?
2. Write the source of water?
3. Is ocean water is fit for drinking?

Home Assignment :-

list some uses of water in your home on your fairnotebooks.

RL

PT Roll no - 2025101
 Subject - Science
 Topic - Gravitation

Class - 9th
 Date -
 Duration - 40 min

Instructional Objectives

After the completion, students will be able to

1. Define gravitation and gravity
2. Explain Newton's universal law of gravitation.

Illustrative Aids

→ Charts → Diagram → picture of Solar system
 → Blackboard and chalks.

Experimental Aids

- Stone, feather and paper to demonstrate free fall
- Small ball and magnet
- Video or simulation of gravitational pull.

Previous Knowledge Assumed

Students already know that:-

1. Object fall toward the earth when dropped.
2. The earth pulls everything downward.

PK Posing

1. What happens when we drop a stone from height?
2. Why does the moon not fall onto the earth?

Announcement of Topic

Today we are going to study about "Gravitation".

Instructional Strategies

sec cum demonstration method, discussion, Brainstorming will be used.

Subject matter

PT Activity

Gravitation

An object when thrown upwards reaches a certain height, then falls down due to gravity.

PT will explain students about gravity i.e gravitation

Universal law of gravitation:- Every object in universe attracts every other object with some force which is proportional to product of their masses and inversely proportional to square of distance b/w them.

PP will tell them to listen properly.

PP will tell them about universal law of gravitation and explain it.

Pupil Activity

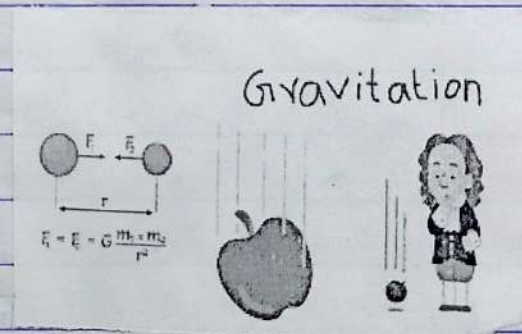
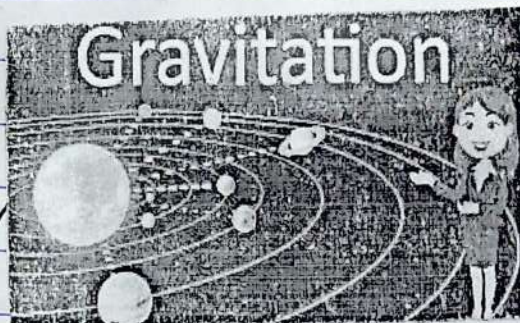
pupil are sitting properly in the class.

pupil are listening to teacher carefully.

pupil will clear their doubts regularly.

pupil will write definition of gravitation on their notebooks.

Teaching Aids



Blackboard Summary

Newton's law of Gravitation.

$$F = \frac{G m_1 m_2}{r^2}$$

F = Force of Gravitation

G = Universal Gravitational Constant

m_1, m_2 = Masses of the object

r = Distance between their centers.

Recapitulation :-

1° state universal law of gravitation

2° write formula of gravitational force.

Home Assignment :-

State the universal law of gravitation and write its mathematical expression.

✓
RL

PT Roll no :- 202521

Subject :- Science

Topic :- Motion & its type

Class :- 8th

Date :-

Duration :- 40 min

Instructional Objectives :-

After the completion of the lesson, students will be able to :-

(i) Define motion

(ii) Identify and explain different types of motion.

- Charts • Pictures
- Videoclips • Blackboard drawing.

Illustrative Aids :-

Experimental Aids :-

Pendulum or swing to show oscillatory motion.
Clock or earth globe to explain periodic and Rotational motion.

Previous Knowledge Assumed :-

Students already know :-

1. Object can move or stay at rest.
2. A force is required to move an object

PK Testing :-

- (i) What happens when you push a toy car?
- (ii) Can you name some things around you that move?

Announcement of	So students we will start our new chapter
Topic :-	"Motion and its type".
Instructional Strategies :-	doc cum demonstration, discussion, Explaining, Brainstorming will be used.

Subject matter

Motion :- A body is said to be in motion if it changes its position w.r.t time. Eg:- motion of ball running.

Types of motion

- (i) Linear motion :- Motion of a body along a straight line.
Eg:- Motion of car along st. path.
- (ii) Circular motion :- Motion of body along a circular path is known as circular motion.
Eg:- Motion of wheel.

PT Activity

PT will explain the term motion.
PT will ask some examples of motion.

PT will explain all types of motion like

- (i) Linear motion
- (ii) Circular motion
- (iii) Random motion
- (iv) Periodic motion
- (v) Oscillatory motion.

Pupil Activity

Pupil will sit in discipline and listen to teacher carefully.

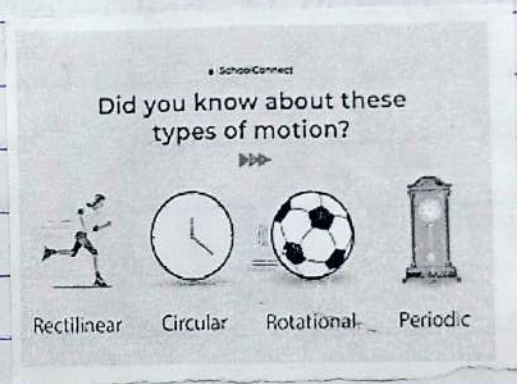
pupil will answer the questions asked by P.T. i.e motion of balls, car.

Pupil will clear their doubts respectively.

pupil will listen carefully & note down on their notebooks.

Pupil will understand the concept properly.

Teaching Aids



Blackboard Summary

Types of Motion

1. Linear Motion
2. Circular Motion
3. Periodic Motion
4. Rotational Motion
5. Oscillatory Motion.

Measurement

$$\text{speed} = \frac{\text{Distance}}{\text{Time}}$$

Subject Matter :- (iii) Random motion :- When a body changes its direction regularly it is said to be Random motion.

(iv) Periodic motion :- Motion which is repeated after regular interval of time is known as periodic motion.

(v) Oscillatory motion :- Motion is said to be oscillatory motion i.e. to & fro motion of body about its mean position.

Recapitulation :- 1. Define motion?

2. Give two examples of motion?

3. How many types of motion is there.

4. To & fro motion is called _____ motion.

Home Assignment :-

1. Revise all types of motion

2. prepare a scrap book on types of motion?

RS

PT Roll no:- 2025101

Subject:- Science

Topic:- States of Matter

Class:- 7th

Date:-

Duration:- 40 min

Instructional
Objectives :-

After the completion of this lesson, students will be able to

- (i) Define matter & explain its meaning.
 - (ii) Compare the properties of solid, liquid and gases.
- charts, Diagrams, Flowchart, picture, Blackboard.

Illustrative
Aids :-

Experimental Aids:-

- Ice cube & beaker
- Boiling water setup
- Balloon and Bottle

Previous Knowledge
Assumed

Students already know:-

1. Everything around us is made of matter.
2. Matter can be touched, seen and felt.

PK Testing :-

→ what is matter?

→ What happens when ice is kept outside in the sun?

Announcement of

Topic :-

Instructional

Strategies :-

So students we will start our new chapter "States of matter".

lec cum demonstration, discussion, question and brainstorming will be used.

Subject Matter

Matter:- Anything that occupies space & have some mass is known as Matter.

State of Matter:- 1. Solid:- In solid molecules are closely packed.

The force of attraction b/w them is high.

Eg:- Ice, Table

2. Liquid:- In liquid molecules are less closely packed. The force of attraction b/w molecules is less than solid.

Eg:- water, paint

3. Gas:- In gas molecules are widely packed. The force of Attraction b/w molecules is too much less.

eg:- O_2 , He, Ne

PT Activity

P.T will firstly tell the students about "Matter"

P.T will explain about states of Matter.

P.T will tell them about solid.

P.T will explain about liquid in detail by using flash cards

P.T will explain about gases in detail.

Pupil Activity

Pupil will open their books & listen to pupil teacher attentively.

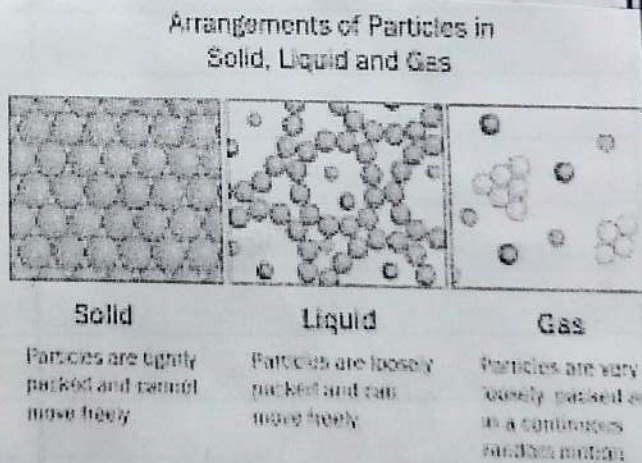
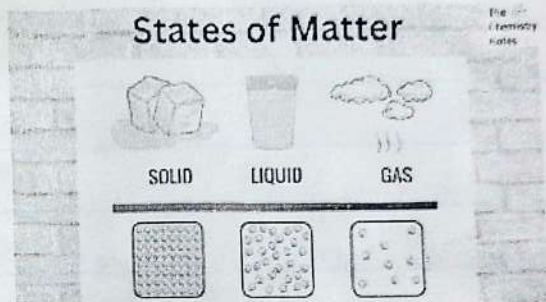
Pupil will understand the concept carefully.

Pupil will clear their doubt respectively.

Pupil will maintain discipline in class

pupil will write it on their notebooks.

Teaching Aids



Blackboard Summary

Change of State

• Melting

Solid $\rightarrow$ Liquid
[Eg. Ice $\rightarrow$ Water]

• Evaporation

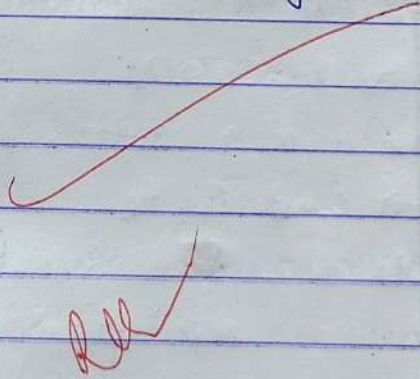
Liquid $\rightarrow$ Gas
[Eg. Water $\rightarrow$ Vapour]

• Condensation

Gas $\rightarrow$ Liquid
[Eg. Vapour $\rightarrow$ Water]

• Freezing

- Recapitulation :-
1. What are the three main states of matter?
 2. Name one example of each of solid, liquid and gas.
 3. What happens when a solid is heated?

- Home Assignment :-
1. Write the characteristics of solid, liquid and gases.
 2. Explain with examples how matter changes its state on heating or cooling.
- 

PT Roll no. :- 2025101

Subject :- Science

Topic :- Acid Rain

Class :- 7th

Date :-

Duration :- 40min

Instructional
Objectives :-

After the lesson, Student will be able to

1. Define acid rain.
2. Explain how acid rain is formed.
3. Suggest measure to control acid rain.

Illustrative Aids :-

- Chart showing causes and effects of acid rain
- Diagram of acid rain formation.
- Blackboard and chalk.

Experimental Aids :-

- Litmus paper test (showing acidic nature of rainwater sample).
- Simple model showing pollution from factories leading to acid rain.

Previous Knowledge
Assumed :-

- Students know about air and water pollution.
- Students are aware that smoke from factories & vehicles causes pollution.

PK Testing :-

Teacher may ask :-

1. What is pollution?
2. What are main source of air pollution?

Announcement of
Topic &
Instructional
Strategies &

Today we will learn about a type of rain that is harmful to our environment - "Acid Rain"
Interactive Discussion, Demonstration method
- Audio-visual Aids, Questioning-Answer Technique.

Subject matter

Acid Rain:- The term acid rain describes the rain which is acidic in nature i.e. contains some acids. The PH for Acid rain is 5.6 approx.

Composition:- Acid rain results from acids like nitric acid & Sulphuric acid present in polluted air.

Cause of acid rain:- Fossil fuel contains compound of Nitrogen & Sulphur in addition to carbon due to combustion of their fuel in large amount of SO_2 , Oxides of Nitrogen & CO_2 get atmosphere. These oxides dissolve in rain water forming cause of acid Rain.

PI Activity

PT will introduce to acid Rain

PT will explain about composition of acid in acidic rain in detail.

PT will ask symbol of Nitrogen & Sulphur.

PT will tell about causes of acid rain and will discuss with students.

Pupil Activity

Students will become attentive to listen pupil Teacher.

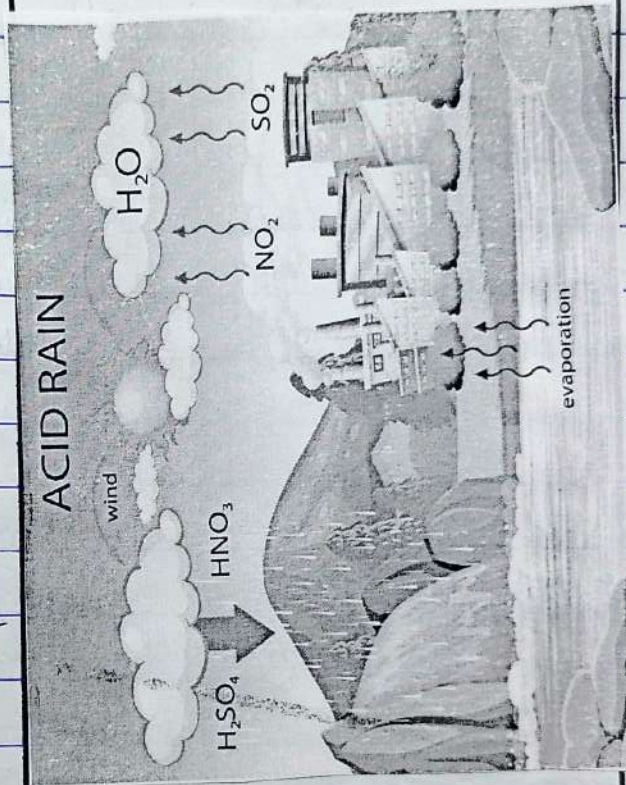
Pupil will understand properly.

pupil will clear their doubts respectively.

pupil will tell symbol of nitrogen & sulphur.

pupil will answer the question asked by PT.

Teaching Aids



Blackboard Summary

Effects of Acid Rain

- Plants :- Damages leaves & Reduces Growth.
- soil :- Reduce fertility
- Water Bodies :- Harms aquatic life
- Human Health :- Cause skin irritation -n

- Recapitulation :-
1. What is acid rain?
 2. Which gases are mainly responsible for causing acid rain?
 3. How does acid rain affect plants and animals?

- Home Assignment :-
1. Define acid rain and write its main causes.
 2. Draw a neat labelled diagram showing how acid rain forms in the atmosphere!

RH

PT Roll no. :- 2025201

Subject :- Science

Topic :- Acids

Class :- 10th

Date :-

Duration :- 40 min

Instructional Objectives :-

- After the completion of the lesson, students will be able to
1. Define acid and explain its general properties.
 2. Identify natural & laboratory

Illustrative Aids :-

- Charts showing examples of acids.
- Blackboard diagrams and notes

Experimental Aids :-

Litmus paper, Beakers & droppers for testing
Turmeric paper or indicator solution

Previous Knowledge Assumed :-

Students already know:-

1. Substance have different tastes (sour, bitter, salty)
2. Some substance react when mixed together

PK Testing :-

- What is taste of lemon or vinegar
- Why should we handle some chemicals carefully?

Announcement of

Topic :-

Instructional

Strategies :-

well Students today we will discuss about topic "Acids".

ec cum demonstration, discussion, Brainstorming and questioning will be used.

Subject Matter

PT Activity

Acids :- The word Acid comes from latin word acitive which means sour.

Acids are defined as compounds which contain one or more hydrogen atoms & when dissolved in water get hydronium ions.

Acids give H^+ ions.

- Acids are sour in taste.

- Acids turn blue litmus to Red

- Eg:- HCl , H_2SO_4 etc.

- Acids contains H^+ ions.

PT will start introduction to acids

PT will define acids

PT will define properties of acids.

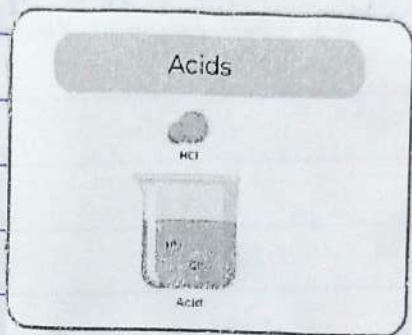
Pupil Activity

Pupil will listen carefully.

pupil will understand the concept deeply

pupil will clear their doubts respectively

Teaching Aids



Strong Acids and Strong Bases

Strong Acids	Strong Bases
Hydrochloric acid (HCl)	Sodium Hydroxide (NaOH)
Perchloric Acid (HClO ₄)	Lithium Hydroxide (LiOH)
Chloric acid (HClO ₃)	Rubidium Hydroxide (RbOH)
Nitric Acid (HNO ₃)	Strontium Hydroxide (Sr(OH) ₂)

Blackboard Summary

Properties of Acids

- Sour in taste
- Turn blue litmus Red.
- Conduct Electricity in solution.
- React with metal to produce hydrogen gas

Metal + Acid $\rightarrow$
Salt + Hydrogen

Recapitulation :-

1. What are acids?
2. Name two natural acids found in food items
3. What is the taste of acids?

Home Assignment :-

1. Define acid and write any three properties of acids.
2. Differentiate between strong and weak acids with two examples each.

all

PT Roll no 8- 2025/01

Subject 8- Science

Topic 8- Movement of body

Class 8- 7th

Date 8-

Duration 8- 40 minutes

Instructional
Objectives :-

Student will be able to

1. Define movement and locomotion
2. Identify different types of joints in human body.

Illustrative Aids :-

Charts showing examples of movement and locomotion. Model of human skeleton. Charts showing different types of joints.

Experimental Aids :-

Demonstration of walking, bending and turning head.

Observation of skeleton model.

Previous Knowledge
Assumed :-

Students may know about major body parts and their functions

PK Testing :-

1. which body parts help you to move?
2. Can all parts of body move in the same way?

Announcement of Topic :-

Instructional Strategies :-

Today we are going to learn about "Movement of body"

Recum demonstration method, questioning, Brainstorming, discussion will be used.

Subject Matter

1. Movement and locomotion :-

Movement is change in position of body part & locomotion is movement of whole body from one place to another.

2. Skeleton System :-

The framework of bones that gives shape & support.

3. Joint & Types :-

Fixed, Hinge, Ball & socket, pivot, Gliding.

4. Role of Muscles :-

Muscles help bone move by contracting & Relaxing.

5. Coordination of Bones, joint & Muscles :-

PT Activity

Ask students to bend their arm or leg to observe movement.

Show chart of skeleton

Ask students to move neck, hand, elbow to feel joint action

Ask students to feel upper arm while bending elbow

Discussion.

Pupil Activity

Students perform simple body movements.

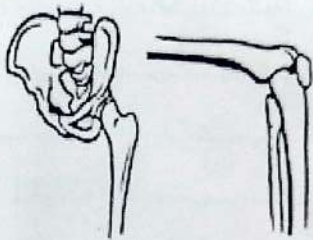
Students identify different bones.

Students describe which body parts move & how

Students observe muscles tightening

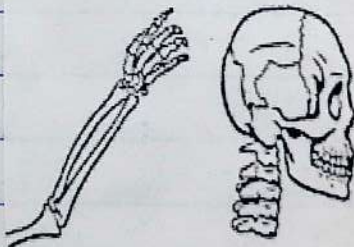
Students explain examples (walking, running, writing)

Teaching Aids



Ball and Socket
(hips and arms)

Hinge Joint
(elbows, knees)



Pivot Joint
(head, arms)

Fixed Joint
(skull)

Blackboard Summary

Movement means a change in the position of a body.

Importance of Movement:-

- Helps living beings to search for food, escape danger.
- It is possible due to muscles and joints

- Recapitulation :-
1. what is movement?
 2. what is locomotion?
 3. Name any two types of joints?
 4. which joint help to move our neck?

Home Assignment :-

1. Draw and label the five types of joint in your notebook.
2. write 5 sentences on how bones and muscles help us in movement.

✓
Re

PT Roll no & 2025101

Subject & Science

Topic & Water & its Properties

Class & 8th

Date &

Duration & 40 min

Instructional Objectives &

After the lesson, students will be able to:-

1. Define water and explain its importance for life.
2. Identify physical properties of water.

Illustrative Aids &

→ charts, diagram
→ pictures, blackboard.

Experimental Aids &

Glass of water, spoon and paper (to show transparency & cohesion)

Previous Knowledge Assumed &

Students already know:-

water is used in daily life for drinking, cooking and cleaning.

PK Testing &

1. What are the three states of water?
2. Can we see water? Can we taste it?

Announcement of Topic

Today, students we will study about "water and its properties"

Instructional Strategies &

So c cum demonstration, discussion, brainstorming are used.

<u>Subject Matter</u>	<u>PT Activity</u>	<u>Pupil Activity</u>	<u>Blackboard work</u>
<u>Physical properties:-</u> 1. water is colourless. 2. water is tasteless. 3. water is Odourless 4. water is transparent 5. Freezing point is 0°C	PT will introduce the concept of the water.	pupil will keep attention in class.	water is natural resource essential for all forms of life.
<u>Chemical formula</u> chemical formula of water is H_2O	PT will explain about physical properties of water by showing formula.	pupil will note the physical properties of water on their notebook.	<u>Properties:-</u> 1. Color ^{less} , Tasteless odor less 2. water is universal solvent.
<u>Different states of water :-</u> Solid, liquid & gas are three state of water. These	PT will conclude lecture by telling about different states of matter.	Pupil will listen carefully to the teacher.	

<u>Subject Matter</u>	<u>PT Activity</u>	<u>Pupil Activity</u>	<u>Blackboard work</u>
states are interchangeable. water gets converted into ice (solid) at 0°C & to vapour (gas) at 100°C & remains liquid b/w 0°C to 100°C .	PT will explain Boiling and freezing point	pupil will clear their doubts Resp.	3. Water boils at 100°C and freezes at 0°C 4. Ice is less dense than water, so it floats

- Recapitulation &
1. Define water?
 2. How much surface of earth is filled with water?
 3. List 4 physical properties of water?

- Home Assignment &
1. Explain physical properties of water?
 2. Explain about 3 states of water in detail.

Pl

PT Roll no :- 2025101

Subject :- Science

Topic :- Alkanes

Class :- 10th

Date :-

Duration :- 40 min

Instructional Objectives :-

After the lesson students will be able to

1. Define alkanes and their general formula.
2. Identify homologous series of alkanes.

Illustrative Aids :-

- Charts
- Diagrams
- Table
- Blackboard

Experimental Aids :-

- Gas burner to show combustion of methane.
- Samples of alkanes.

Previous Knowledge Assumed :-

Students already know:-

1. Basic concept of Hydrocarbons.
2. Single, double and triple covalent bonds.

PK Testing :-

→ What are hydrocarbons?

→ Can you name a simple hydrocarbons?

Announcement of Topic :-

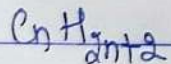
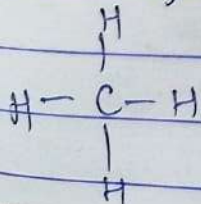
So students we will start very interesting Chapter "Alkanes".

Instructional Strategies :-

* Lec cum demonstration method, Brainstorming, Discussion will be used.

Subject matter

Alkanes are the hydrocarbons in which all the carbon atoms are single covalent bond. These compounds are known as saturated hydrocarbons.

General formula of Alkanes(i) Methane, CH₄P.T Activity

PT will introduce to alkanes.

PT will write

general formula of Alkanes.

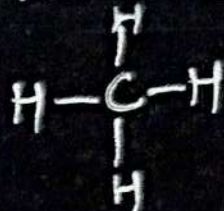
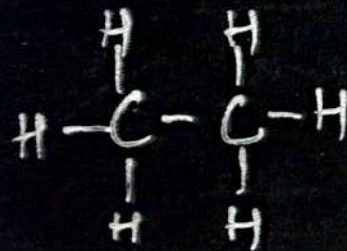
PT will explain Methane.

Pupil Activity

Students will write it on their notebooks properly.

pupil will understand & clear their doubts respectively

pupil will listen to teacher carefully.

Blackboard work1. Methane (CH₄)2. Ethane (C₂H₆)

<u>Subject Matter</u>	<u>PT Activity</u>	<u>Pupil Activity</u>	<u>Blackboard Work</u>
(ii) Ethane C_2H_6 $\begin{array}{c} H & H \\ & \\ H-C & - & C-H \\ & \\ H & H \end{array}$	PT will explain about ethane.	pupil will maintain discipline in class.	3. Propane (C_3H_8) $\begin{array}{c} H & & H & & H \\ & & & & \\ H-C & - & C & - & C-H \\ & & & & \\ H & & H & & H \end{array}$
(iii) propane C_3H_8 $\begin{array}{c} H & H & H \\ & & \\ H-C & - & C & - & C-H \\ & & \\ H & H & H \end{array}$	PT will explain about propane.	pupil will clear their doubts carefully.	

- Recapitulation :-
- What are hydrocarbons?
 - What are alkanes?
 - Write the formula of following?
 - (i) Ethane (ii) propane
 - (iii) Pentane (iv) Hexane

Home Assignments

Draw a Scrap-book on all types of hydrocarbons i.e. alkanes.

PT Roll no :- 2025101

Class :- 8th

Subject :- science

Date :-

Topic :- Chemical Compounds

Duration :- 40 min

Instructional objectives :-

After the completion of this lesson students will be able to
1) Define chemical compounds and diff. b/w Elements & mixtures.
2) Identify Example of common compounds.

Illustrative Aids :-

- charts
- Pictures.
- Diagrams.
- Blackboard Drawing

Experimental Aids :-

- Test tubes, burner and spatula
- Sample of salt, sugar, chalk (compounds)

Previous Knowledge Assumed :-

- Students already know :-
1. Matter is made up of small particles called atoms.
 2. They have studied elements and mixtures.

PK Testing :-

- What is an element? Give one example.
- What is mixture?

Announcement of Topic :-

So students we will start very interesting Chapter "Chemical Compounds".

Instructional Strategies :-

Accum demonstrations method, discussion, Brainstorming will be used.

Subject Matter
Definition :- A chemical compound is a substance formed when two or more elements combine chemically in fixed ratio.

• Examples: Water (H_2O), Carbon dioxide (CO_2)

Characteristics of Compounds

1. Compounds are formed by chemical combination of elements.
2. Compounds cannot be separated by physical method.

PT Activity
 PT will give Definition of chemical compounds.

PT will give Examples of compounds.

PT will use chart to explain how elements combine chemically.

Pupil Activity
 Observe the material show by the PT.

Pupil will answer the question asked by the PT

pupil will maintain discipline in the class.

Teaching Aids

Blackboard Summary

Types of Compounds
 ↙ ↘
 organic compound inorganic compound

<u>Subject Matter</u>	<u>PT Activity</u>	<u>Pupil Activity</u>	<u>Teaching Aids</u>	<u>Blackboard work</u>
<u>Mixtures</u> Mixtures have variable compositions. They can be separated by physical method.	PT will tell about the mixtures	Pupil will note down important definitions and examples.		<u>Characteristics</u> (i) Formed by chemical reaction (ii) Elements are combined in fixed ratio

- Recapitulation :-
1. What is chemical compounds?
 2. Give two examples of compounds.
 3. How are compounds different from mixture?

- Home Assignment :-
1. write five examples of chemical compounds found in your daily life.
 2. write chemical formula of :-
 - water
 - Carbon dioxide
 - Ammonia.

PT Roll no :- 2025101

Class :- 7th

Subject :- Science

Date :-

Topic :- Lens and Mirrors

Duration :- 40 min

Instructional

Objective :-

After the completion of this lesson, students will be able to :-
1) Define mirror and lens
2) Identify and diff. between types of mirrors.

Illustrative Aids :-

- charts
- Diagram
- Pictures
- Blackboard.

Experimental Aids :-

- Plane mirror, Concave mirror and Convex mirror.
- Concave lens and Convex lens

Previous Knowledge

Assumed :-

Students already know :-

1. Light travels in a straight line
2. Light gets travel reflected from shiny surface.

PK. Testing :-

- What happens when light falls on a shiny surface?
- Can light pass through glass or water?

Announcement of

Topic :-

Today we are going to study about
"lens and mirrors"

Instructional

Strategies :-

Rec am demonstration, Brainstorming, discussion will be used.

Subject Matter
Mirror is a polished surface that reflects light.

Types of Mirror :-
• plane mirror :-
Form a virtual, erect image of same size.

• Concave mirror :-
Converges light, may form real & virtual image.

• Convex mirror :-
Diverges light, form a virtual, erect and smaller images.

Lens :- A transparent medium that

PT Activity
PT will show different mirror and lenses to students

PT will demonstrate reflection using a flashlight & plane mirror.

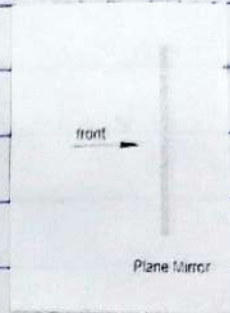
Show image formed by lens.

Pupil Activity
pupil will observe, mirror, and lenses.

Pupil will participate in question answer discussion

Draw ray diagram in their notebook

Teaching Aids



Blackboard work

Types of Mirror

1. plane Mirror
2. Concave Mirror
3. Convex Mirror

Subject Matter
reflects light

Types &

- Convex lens &
Thicker in middle,
Converges light rays.
- Concave lens &
Thinner in middle,
Diverges light rays.

PT Activity

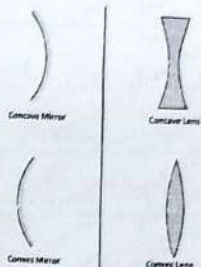
PT will
draw ray
diagrams
on the
blackboard.

Pupil Activity

Perform
small obs.
Experiments
in groups

Teaching Aids

Mirror Vs Lens



Mirror Formula: $\frac{1}{v} + \frac{1}{u} = \frac{1}{f}$

Lens Formula: $\frac{1}{v} - \frac{1}{u} = \frac{1}{f}$

Blackboard Summary

Types of lens

- Convex lens
- Concave lens

Recapitulation & 1. what is mirror?

2. Name three types of mirrors.

3. What is the difference between Concave and Convex mirrors?

Home Assignment & 1. Draw ray diagrams

2. Write two use each of mirrors and lenses.

PT roll no. :- 2025101

Subject :- science

Topic :- speed

Class :- 8th

Date :-

Duration :- 40 min

Instructional Objectives :-

After completion of lesson students will able to

1. Define speed & understand its meaning.

2. Identify the formula for speed.

Illustrative Aids :-

→ chart showing formula for speed.

→ pictures of moving vehicles

Experimental Aids :-

Stopwatch, measuring Tape, ball, chalk to mark distance on floor

Previous KnowledgeAssumed :-

Students already know that!

1. Objects move from one place to another - motion.

2. Time is measured in second, min, hours.

Pk Testing :-

1. Name some examples of moving objects.

2. How do we measure time?

Announcement ofTopic :-

well students, today we will study about "Speed".

Instructional Strategies :-

See cum demonstration, Brainstorming, discussion will be used.

Subject Matter

Definition :-

The speed of a body is the distance travelled by its per unit time.

Formula

$$\text{Speed} = \frac{\text{Distance}}{\text{Time}}$$

S.I unit :-

- Distance - metre (m)
- Time - seconds
- Speed - metre per second (m/s)

Types of Speed

1. Uniform speed
2. Non uniform

PT Activity

Draw the speed formula triangle on the board.

Demonstrate a simple experiment by rolling a toy car

PT will show how to calculate speed using the stopwatch & distance.

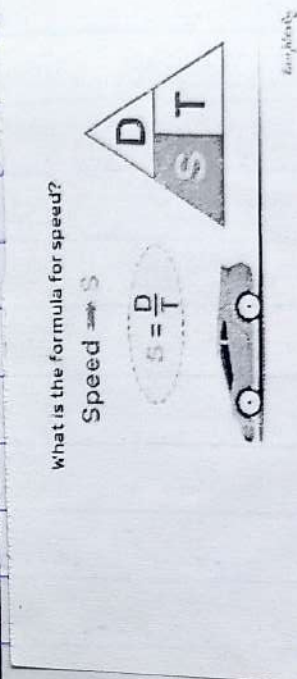
Pupil Activity

pupil will observe the teacher's demonstration

pupil will note down the formula and units

Pupil will participate in group activity

Teaching Aids

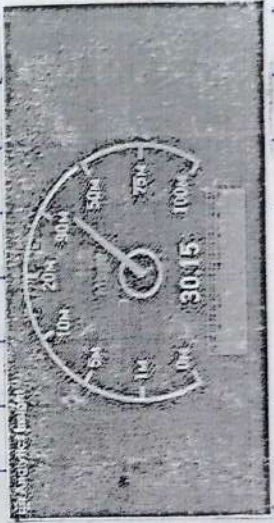


Blackboard Summary

$$\text{Speed} = \frac{\text{Distance}}{\text{Time}}$$

Types :-

1. Uniform speed
2. Non uniform speed.

<u>Subject Matter</u>	<u>PT Activity</u>	<u>Pupil Activity</u>	<u>Teaching Aids</u>	<u>Blackboard work</u>
<u>Importance of Speed :-</u> 1. Helps in transportation and travel planning. 2. Used in vehicles, trains and airplanes. 3. Useful in sports and scientific measurement.	PT will Explain real-life Examples	pupil will answer question during discussion.		

Recapitulation :-

1. Define Speed.
2. write the formula for Speed.
3. what are the SI unit of distance, time & Speed?

Home Assignment :-

1. define speed and write its formula.
2. write two examples of uniform & non-uniform Speed.
3. A train travels 180 km in 3 hours. Find its speed.

PT Roll no:- 2025101

Class :- 8th

Subject :- Science

Duration :- 40 min

Topic :- Chemical Rⁿ & its types

Date :- 40 min

Instructional Objectives :-

After the completion of this lesson students will

(i) Define a chemical reaction

(ii) Identify signs of a chemical reaction.

Illustrative Aids :-

1. Chart showing types of chemical reaction.

2. Diagrams of reactants and product.

Experimental Aids :-

Test Tube, dropper, beakers.

Vinegar and baking soda.

Previous knowledge assumed :-

Students already know that:-

1. Matter can exist as elements and compound

2. A change can be physical & chemical.

PK Testing :-

(i) What is physical change? Give one example

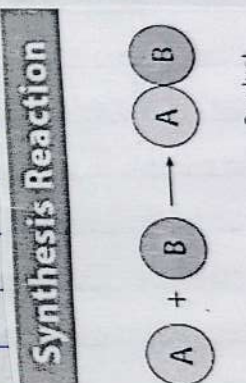
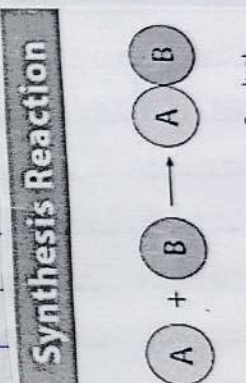
(ii) What happens when you burn paper.

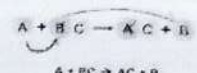
Announcement of Topic

Well students Today we will study about "Chemical reaction and its types"

Instructional Strategies :-

lec cum demonstration method, question and brainstorming will be used.

<u>Subject Matter</u>	<u>PT Activity</u>	<u>Pupil Activity</u>	<u>Teaching Aids</u>	<u>Blackboard Summary</u>
A chemical reaction is a process in which one or more substance are converted into new substance.	PT will perform a small Experiments	Observe Experiments Carefully.	Types of Chemical Reaction 	
<u>Types of chemical Rⁿ</u> 1. <u>Combination Rⁿ</u> Two or more sub. combine to form a single product. $H_2 + Cl_2 \rightarrow 2HCl$	PT will draw and explain types of reaction on board.	Record the observation in their notebooks	Synthesis Reaction 	<u>Types of Chemical Reactions</u> (i) Combination Rⁿ (ii) Decomposition Rⁿ (iii) Displacement Rⁿ (iv) Double Displacement Rⁿ
2. <u>Decomposition Rⁿ</u> A single substance break into two products $2H_2O \rightarrow 2H_2 + O_2$	PT will discuss real life Examples.	Pupil will maintain Discipline		

<u>Subject Matter</u>	<u>PT Activity</u>	<u>Pupil Activity</u>	<u>Teaching Aids</u>	<u>Blackboard Summary</u>
3. <u>Decomposition Rⁿ</u> A single substance break down into two substance	PT will ask questions	Pupil will listen carefully and answer the questions	 Displacement Reaction	
4. <u>Displacement Rⁿ</u> A more reactive displace a less reactive $\text{Fe} + \text{CuSO}_4 \rightarrow \text{FeSO}_4 + \text{Cu}$				

Recapitulation:-

1. what is chemical reaction?
2. Name two signs of chemical reaction
3. what happens when iron react with copper sulphate?

Home Assignment:-

1. Define chemical Reaction
2. write and classify the following Reaction
 - $\text{CaCO}_3 \rightarrow \text{CaO} + \text{CO}_2$
 - $\text{Zn} + \text{H}_2\text{SO}_4 \rightarrow \text{ZnSO}_4 + \text{H}_2$

PT Roll no. :- 2085101

Subject :- Science

Topic :- Metal and non metal

Class :- 8th

Duration :- 40 min

Date :-

Instructional Objectives :-

After completing this lesson, students will be able to

1. Define metal & non-metal.

2. List the physical & chemical properties of metal.

• Chart showing difference between metals & non-metal

• Table showing examples and uses.

→ Iron nail, copper wire, aluminum foil

→ Sulphur powder, Test Tube holder

Students already know that:

1. Substance are made up of elements.

2. Elements can have different physical appearances

1. What is an element?

2. Have you seen ^{Iron} material or copper around you?

Well students, today we will study about "Metal & Non metal"

Pr. Testing :-

Announcement of Topic

Instructional Strategies :-

lec cum demonstration, Brainstorming, discussion will be used.

<u>Subject Matter</u>	<u>PT Activity</u>	<u>Pupil Activity</u>	<u>Teaching Aids</u>	<u>Blackboard Summary</u>
<u>Metals</u> :- Elements that are hard, shiny, ductile and good conductors of heat & Electricity <u>physical properties</u> (i) Hard & lustrous. (ii) Malleable & ductile. <u>Chemical properties</u> → React with oxygen → React with acids $\text{Zn} + \text{HCl} \rightarrow \text{ZnCl}_2 + \text{H}_2$	PT Show samples of metal & non-metals. PT will show hammering (malleability)	Pupil will observe the demonstrations carefully. Pupil will note down the difference between metal and non-metal	 Carbon  Red Phosphorus  Sulphur	<u>Metals</u> ↳ Hard & lustrous ↳ Malleable and Ductile
<u>Non metals</u> :- Elements that are soft, dull, non-lustrous. <u>physical properties</u> - (i) poor conductors (ii) Generally soft.	PT will demonstrate reaction of metal with acids to show hydrogen gas evolution.	Pupil will participate in class discussion and answer questions		

<u>Subject Matter</u>	<u>PT Activity</u>	<u>Pupil Activity</u>	<u>Teaching Aids</u>	<u>Blackboard Summary</u>
<u>Chemical properties</u> :- • React with oxygen → non metallic oxides. $C + O_2 \rightarrow CO_2$	PT will show chart comparing physical & chemical properties	Pupil will write examples and uses in their notebook.		<u>Non-metals</u> ↳ soft ↳ dull ↳ Non-lustrous

Recapitulation :-

1. What are metals? Give two examples.
2. Name any two properties of non-metals.
3. What happens when a metal reacts with an acid?

Home Assignment :-

1. Write five differences between metal & non-metal.
2. Why are metals used to make cooking utensils?

But

PT Roll no B- 2025101

Class B- 8th

Subject B- Science

Duration B- 40 min

Topic B- Synthetic Fibres & plastics.

Date B-

Instructional Objectives B-

After the completion of the lesson, Students will be

1. Define Synthetic fibres and plastics.
 2. Classify different types of synthetic fibres.
- charts, diagram, Real Samples
Flashcards.

Illustrative Aids B-

Experimental Aids B-

samples of different fibres
Candle, tongs, match box

Previous Knowledge Assumed

Students already know:-

1. clothes are made of fibres & fabrics.
2. Fabric can be obtained from plants & animals.

PK Testing B-

1. what is a fibre?

2. From where do we get cotton & silk?

Announcement of Topic B-

Well student, today we will study about
"Synthetic Fibres and plastics"

Instructional Strategies B-

docum demonstration, Brainstorming,
questioning will be used.

Subject Matter

Synthetic fibres

Man-made fibres prepared by chemical process using petrochemicals.

Eg:- Rayon, Nylon, polyester, Acrylic.

Types & uses.

1. Rayon's use for making shirts, sarees.

PT Activity

PT will show samples of different fibres and ask students to touch.

PT will demonstrate differences between Cotton and nylon clothes.

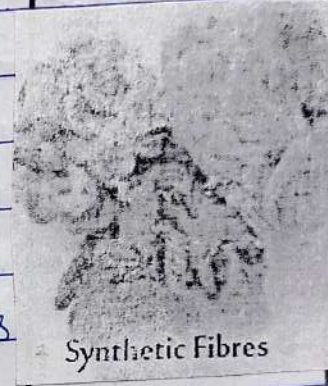
Pupil Activity

pupil observe fibre sample and note differences

Pupil will classify given materials into natural or synthetic

pupil will participate in discuss on plastic

Teaching Aid



Blackboard work

• Synthetic fibre are man-made fibres prepared from chemical substances

<u>Subject matter</u>	<u>PT Activity</u>	<u>Pupil Activity</u>	<u>Teaching Aid</u>	<u>Blackboard Summary</u>
2. <u>Nylon</u> & For making Ropes, parachutes, toothbrush.	PT will explain use in the classification of fibres with chart	use in daily life.		Plastic are synthetic materials that can be moulded into different shapes
3. <u>polyester</u> & - For clothes, PET bottles		pupil will write example on notebook.		
4. <u>Acrylic</u> & For making sweaters				

Recapitulation :-

1. what are synthetic fibres? give two examples.
2. write two advantages of synthetic fibres.
3. Name two types of plastics.

Home Assignment :- write four differences between natural and synthetic fibres.

Re

PT Roll no. :- 2025101

Subject :- Science

Topic :- Heat

Class :- 7th

Duration :- 40 min

Date :-

Instructional
Objective :-

After the completion of this lesson student will able to

1. Define Heat and Temperature.
2. Differentiate between heat and temperature.

Illustrative

Aids :-

Experimental Aids :-

- Chart showing modes of heat transfer.
- Diagram of laboratory thermometer.
- Metal rod, candle flame and clamps.
- Thermometer for measuring temperature

Students already know that:-

1. Sun gives us heat and light.
 2. Hot object feel warm and cold object feel cool.
- How do you feel when you touch a hot cup of tea?

Well student, Today we will study about topic "Heat"

Announcement of
Topic :-

Instructional
Strategies :-

doc cum demonstration, questioning, Brainstorming will be used.

Subject Matter

Concept of Heat:-

- Heat:- A form of energy that cause a change in temperature.
- Temperature:- Degree of Hotness or coldness of a body, measured in $^{\circ}\text{C}$
- Unit of heat energy:- Joule (J)

→ Transfer of Heat:-

Heat flows from a hotter object to colder one until both attain the same temperature.

Modes of Heat transfer

1. Conduction
2. Convection
3. Radiation.

PT Activity

→ PT will demonstrate heat conduction using a metal rod and candle.

→ PT will show convection currents in water using potassium permanganate.

→ PT will display charts of thermometer and explain demonstration.

Pupil Activity

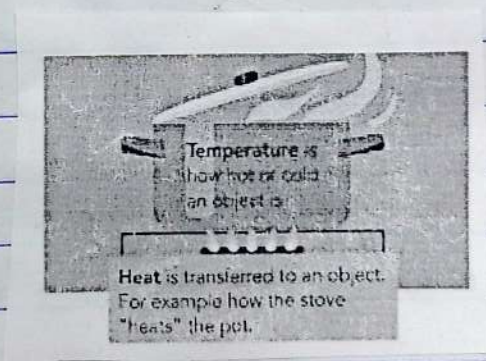
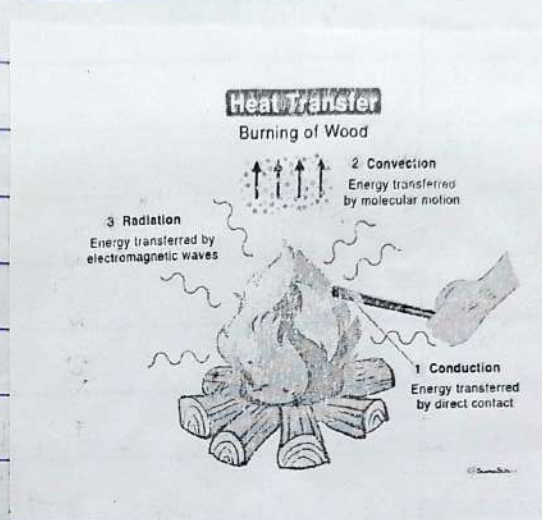
→ pupil will observe carefully.

→ pupil will identify which type of heat transfer is taking place.

→ pupil will maintain discipline.

→ pupil will record temperature reading from thermometer.
demonstration.

Teaching Aids



Blackboard Summary

Heat is a form of energy that is transferred from a hot object to a cold object.

Unit of Heat

SI unit :- Joule (J)

other unit :- Calorie (cal)

$$1 \text{ Cal} = 4.18 \text{ J}$$

Recapitulation :- 1. what is heat?

2. what is difference between heat and temperature?

3. Name three modes of heat transfer.

Home Assignment :- 1. Define conduction, Convection and radiation with examples.

2. Draw a neat diagram of a laboratory thermometer.

ALL

PT Activity :- 2025101

Subject :- Science

Topic :- Pollution of Air & Water

Class :- 8th

Duration :- 40 min

Date :-

Instructional
Objective :-

After completing this lesson, student will be able to

1. Define air pollution and water pollution.
2. Identify the major pollutants of air and water.

Illustrative Aids :-

→ charts showing types of pollution
→ Diagram of acid rain & smog formation.

Experimental Aids :-

Two jars : one with clean water.
Candle, Glass jar, PH paper

Previous Knowledge
Assumed :-

Students already know that:-

1. Air & water are essential for life.
2. Smoke, waste and chemicals make surrounding

PK Testing :-

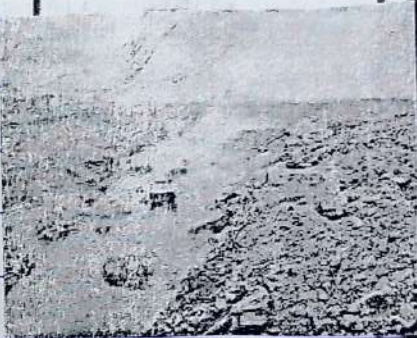
→ what is the importance of air & water in our ^{dirty} life?
→ How can we keep our environment clean?

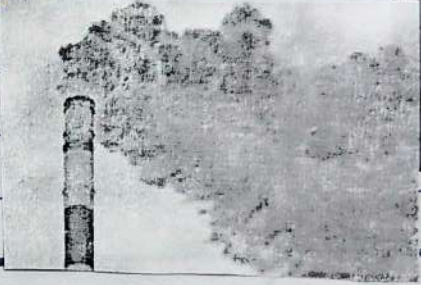
Announcement of
Topic :-

well Students, Today we will study about
"Pollution of Air and water".

Instructional
Strategies :-

see cum demonstration method, Brainstorming, questioning and discussion will be used.

<u>Subject Matter</u>	<u>PT Activity</u>	<u>Pupil Activity</u>	<u>Teaching Aids</u>	<u>Blackboard Summary</u>
<u>Air pollution</u> :- The Contamination Of air by harmful substance. Such a smoke, gases and dust.	PT will show two sample for Comparison	Pupil will observe carefully.		Pollution is an undesirable change in the environment <u>Major Air</u> <u>Pollutants</u> • Carbon dioxide • Carbon monoxide • sulphur dioxide • smoke & dust
<u>Sources</u> :- → vehicle emissions → Burning of fossil fuel. → Forest fires.	PT will demonstrate air pollution using a burning candle covered with jar.	Pupil will identify pollutants in given pictures. pupil will write down the sources of air and water pollution		
<u>Water Pollution</u> Contamination of water bodies by harmful	PT will explain types			

<u>Subject Matter</u>	<u>PT Activity</u>	<u>Pupil Activity</u>	<u>Teaching Aids</u>	<u>Blackboard Summary</u>
Substances such as chemicals, plastic.	using charts and pictures.	pupil will suggest their own ideas for reducing pollution.		<u>Cause:-</u> • Forest fire • Volcanic Eruption • Use of fossil fuel
Sources:- • Domestic sewage. • Industrial discharge etc.	Discuss preventive measure through question-answer method.			

Recapitulation:-

1. What is air pollution? Name two pollutants of air.
2. What are the main causes of water pollution?
3. What is acid rain?

Home Assignment:-

1. Write five differences between air & water pollution.
2. Mention three ways to control water pollution.

PT Roll no:- 2025101

Subject :- Science

Topic :- Cell- Structure & function.

Class :- 8th

Date :-

Duration :- 40 min

Instructional Objectives:-

After the completion, Students will be able to

(i) Define a cell.

(ii) Identify the main parts of cell.

→ chart showing structure of plant and animal cell; 3D model of cell.

→ Microscope

→ Tissue paper, beaker

→ glass slides & cover slip

Experimental Aids :-

Previous Knowledge
Assumed :-

Students already know that:

1. All living things are made up of small parts.

2. They have studied basic living & non-living.

Pre-Testing :-

Students already know that:-

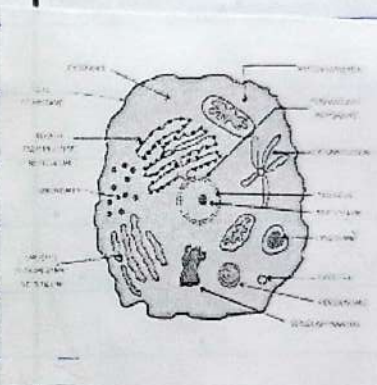
1. What are living organisms made up of?

Announcement of
Topic :-

Well students, Today we will study about
"Cell - Structure and function".

Instructional
Strategies :-

Accum demonstrations, questioning, Brainstorming
will be used.

<u>Subject Matter</u>	<u>PT Activity</u>	<u>Pupil Activity</u>	<u>Teaching Aid</u>	<u>Blackboard work</u>
<u>Definition:-</u> A cell is the smallest structural & functional unit of life	PT will show the chart and model of plant & animal cells.	pupil will observe the onion peel under microscope.		
<u>discovery of cells</u> Robert Hooke discovered cells in cork slices using a microscope.	PT will demonstrate onion peel slide under microscope	Pupil will draw diagram of plant & animal cell.		Cell is basic structural & functional unit of all living organism. Cell is "Building block of life"
<u>Types of cells</u> • Unicellular • Multicellular	PT will explain each cell organelle using			

<u>Subject Matter</u>	<u>PT Activity</u>	<u>Pupil Activity</u>	<u>Teaching Aid</u>	<u>Blackboard word</u>
<u>parts of cell :-</u> 1. Cell membrane. 2. Cytoplasm 3. Nucleus.	labelled diagram.			Types of Org. (i) Unicellular (ii) Multicellular

- Recapitulation :-
1. who discovered a cell?
 2. Name the main parts of a cell.
 3. what is the function of the nucleus?

- Home Assignment :-
1. Define a cell and name its main parts.
 2. Write a short note on "Discovery of the cell."

PT Roll no :- 2023101

Subject :- Science

Topic :- Soil

Class :- 7th

Date :-

Duration :- 40 min

Instructional
Objective :-

After the completion, students will be able to
1. Define soil and explain how it is formed.

2. Describe the different layers of soil

Illustrative Aids :-

- Charts
- samples of sand, clay
- Diagram of soil profile.

Experimental Aids :-

→ Beakers or glass jar with soil & water.

→ Magnifying glass to observe soil particle

Previous Knowledge
Assumed :-

Students should already know

1. plants grow in soil.

2. Soil supports trees and crops.

Pk Testing

1. what do plants grow in?

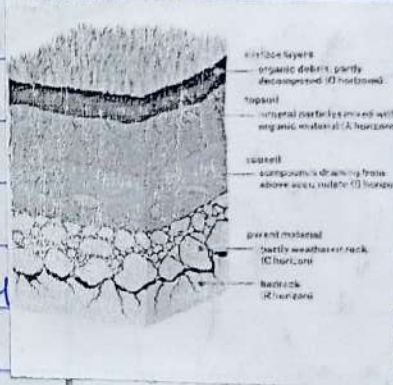
2. Have you seen different types of soil?

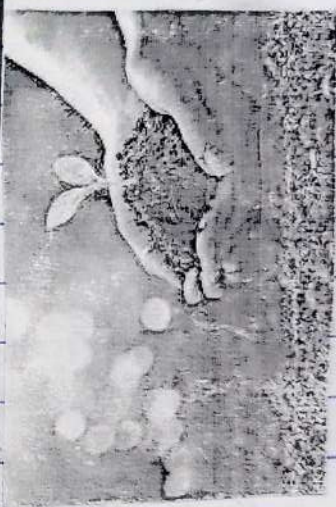
well, students, today we will learn about
"soil"

Announcement of
Topic

Instructional
Strategies

recum demonstration, discussion, Brainstorming
will be used.

<u>Subject Matter</u>	<u>PT Activity</u>	<u>Pupil Activity</u>	<u>Teaching Aid</u>	<u>Blackboard Summary</u>
<u>Definition of soil</u> is the uppermost layer of the Earth's crust that support plant life.	PT will Explain the definition of soil	Pupil will listen Carefully. Pupil will maintain discipline.		
<u>Formation of soil</u> • Soil is formed by the breaking down of rocks due to wind, water • This process is called weathering	PT will displays the chart of soil profile and Explain Each Horizon.	Pupil will observe & Chart Carefully.		<u>Soil Contains</u> • Mineral Particles • organic Matter • Water • Air • living organism
<u>layers of soil</u> 1. <u>A-Horizon</u> - Topsoil				

<u>Subject Matter</u>	<u>PT Activity</u>	<u>Pupil Activity</u>	<u>Teaching Aid</u>	<u>Blackboard work</u>
2. <u>B-Horizon</u> & - <u>subsoil</u> 3. <u>C-Horizon</u> & - <u>parent rock.</u>	PT will discuss soil types and crops using Examples	pupil will participate in discussion.		<u>Types of Soil</u> (i) Sandy soil (ii) clayey soil (iii) loamy soil
<u>Types of Soil</u> 1. Sandy 2. clayey 3. loamy <u>Importance of Soil</u> • provide nutrients & water to plants • Home to many living organism • Helps in water filtration		Pupil will note down the definition of soil		

PT Roll no B- 2025101

Subject :- Science

Topic :- Coal and Petroleum.

Class :- 8th

Duration :- 40 min

Date :-

Instructional Objectives :-

After completing lesson, student will be able to

1. Define fossil fuel.

Illustrative Aids :-

2. Describe how coal & petroleum are formed.

- Charts
- Flowchart
- Diagram
- Blackboard and chalk.

Experimental Aids :-

Candle & matchbox, chart of energy resources

Previous Knowledge :-
Assumed

Students already know that:-

- (i) Fuels are used for cooking, transport
- (ii) Firewood, gas & petrol are source of Energy.

PK Testing :-

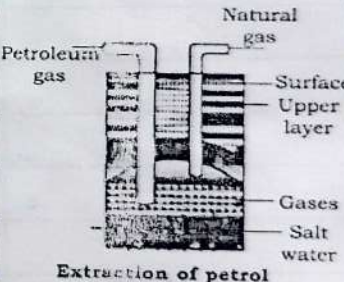
1. What do we use for running cars & buses?
2. Can we create coal & petroleum quickly?

Announcement of Topic :-

All students today we will learn about "Coal and petroleum".

Instructional Strategies

decum demonstration, discussion, Brainstorming & questioning will be used.

<u>Subject Matter</u>	<u>PT Activity</u>	<u>Pupil Activity</u>	<u>Teaching Aid</u>	<u>Blackboard Summary</u>
<u>Fossil Fuel</u> • Fuels formed from the remains of plants and animals buried under the earth million of years ago Examples- Coal, petroleum.	PT will show samples or pictures of Coal and petroleum.	Pupil will observe chart & samples carefully.	 Coal	<u>Types of Coal</u> 1. Peat 2. lignite 3. Bituminous 4. Anthracite <u>Uses :-</u> • Cooking • Industries • Thermal power plants
<u>Formation of Coal</u> • Formed from Vegetation buried under soil. • Due to heat & pressure.	PT will Explain formation process with the help of charts.	Pupil will note down notes on formation and uses.	 Extraction of petrol	
	PT will demonstrate uses of fossil fuel			

<u>Subject Matter</u>	<u>PT Activity</u>	<u>Pupil Activity</u>	<u>Teaching Aid</u>	<u>Blackboard Summary</u>
<u>Formation of Petroleum</u> • Formed from dead organism buried under the sea. • Found trapped b/w layers of rock.	Using real life examples PT will encourage discussion.	Pupil will participate in class discussion		<u>Petroleum Product</u> • Petrol • Diesel • Kerosene • Lubricating oil.

Recapitulation :-

1. What are fossil fuel? Give two examples.
2. How is Coal formed?

Home Assignment :-

1. Write short note on
 - formation of Coal
 - formation of petroleum.

PT Roll no - 2025101

Class - 6th

Subject - Science

Duration - 40 min

Topic - Light & Shadow

Date -

Instructional Objectives

After completion of lesson students will be able to

(i) Define light

(ii) Understand how shadows are formed.

Illustrative Aids

→ chart showing transparent, translucent & opaque object.

→ Diagram showing formation of shadow.

Experimental Aids

• Torch or candle

• Ball or any opaque object

Previous Knowledge Assumed

Students already know that

1. we can see objects only when there is light.

2. Object can block or allow light to pass through.

1. What is shadow.

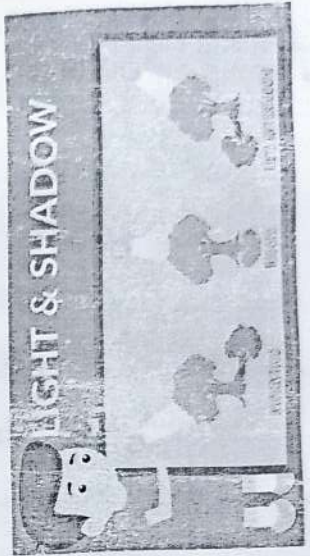
2. Do all objects form shadow?

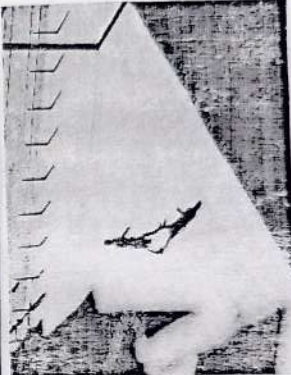
Announcement of Topic

So students today we will learn about "Light & Shadow"

Instructional Strategies

Lesson demonstration method, Explanation, questioning, Brainstorming, discussion will be used.

<u>Subject Matter</u>	<u>PT Activity</u>	<u>Pupil Activity</u>	<u>Teaching Aids</u>	<u>Blackboard work</u>
<u>Light &</u> • Light is form of energy. • Light travels in straight line. • The path of light is called a ray.	PT will show the Experiment of light & shadow using torch & object. PT will explain real life examples	Pupil will observe the demonstration carefully. Pupil will identify which material allow light & shadow formation on board.		<u>Light &</u> It is form of energy that enable us to see objects <u>Types of object</u> 1. Transparent 2. Translucent 3. Opaque.
<u>Shadow &</u> • Shadow is formed when	PT will draw diagram of light	Pupil will note how shadow changes		

<u>Subject Matter</u>	<u>PT-Activity</u>	<u>Pupil Activity</u>	<u>Teaching Aids</u>	<u>Blackboard Summary</u>
Light is blocked by an opaque object A shadow is always dark. Three Things:- 1. A source of light 2. An opaque obj 3. A screen.	and shadow formation on the board.	When the object moves. pupil will answer teacher's questions		<u>Shadow</u> is formed when light is blocked by an opaque object.

Recapitulation :-

1. What is light?
2. How is shadow formed?

Home Assignment :-

1. Draw a neat labelled diagram showing the formation of shadow.
2. Write the differences between transparent, translucent and opaque object.

PT Roll no:- 2025101

Subject:- Science

Topic:- Crop production & Management

Class:- 8th

Duration:- 40 min

Date:-

Instructional
Objective:-

After the completion of the lesson, student will able

- 1) Define crop & agriculture.
- 2) Explain the method of sowing & storage.

Illustrative Aids:-

→ Charts → Diagram
→ Pictures → Blackboard & chalk

Experimental Aids:-

- Sample of seeds, fertilizers and manure.
- Model

Previous Knowledge
Assumed:-

Students already know that

- 1) plants are essential for food.
- 2) Farmers grow crops in field.

PK Testing:-

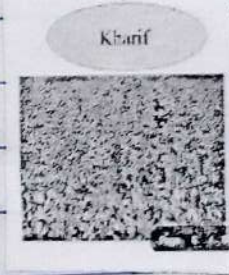
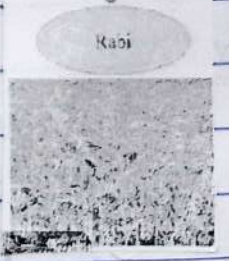
- 1) From where do we get our food?
- 2) What do farmers grow in fields?

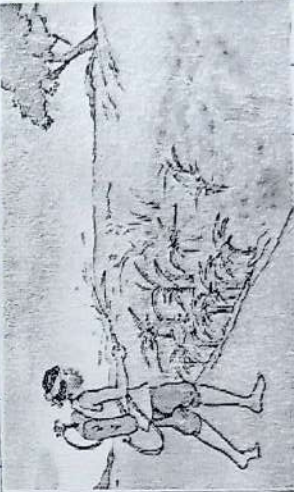
Announcement of
Topic:-

So students, let's start our new topic
"Crop production and Management."

Instructional
Strategies:-

Sec cum demonstration, questioning, Brainstorming and discussion will be used.

<u>Subject Matter</u>	<u>PT Activity</u>	<u>Pupil Activity</u>	<u>Teaching Aids</u>	<u>Blackboard Summary</u>
<u>Crop</u> :- when plants of the same kind are grown and cultivated at same place on large scale it is called crop Eg:- wheat, Rice, Maize	PT will display Chart & tools used in Agriculture	Pupil will observe demonstration & samples carefully.		
<u>Types of Crops</u> :- 1. <u>Kharif Crops</u> :- Grown in Rainy Season Eg:- Cotton, Maize	PT will demonstrate seed germination using soaked seed.	pupil will identify different tools and crops from charts		(i) <u>Kharif Crops</u>
2. <u>Rabi Crops</u> :- Grown in Winter Season Eg:- Mustard, Pea.	PT will Explain Kharif & Rabi Crops with pictures.	Pupil will maintain discipline		(ii) <u>Rabi Crops</u> Eg:- Cotton, Maize are Kharif Crops Eg:- Mustard & pea are Rabi Crops

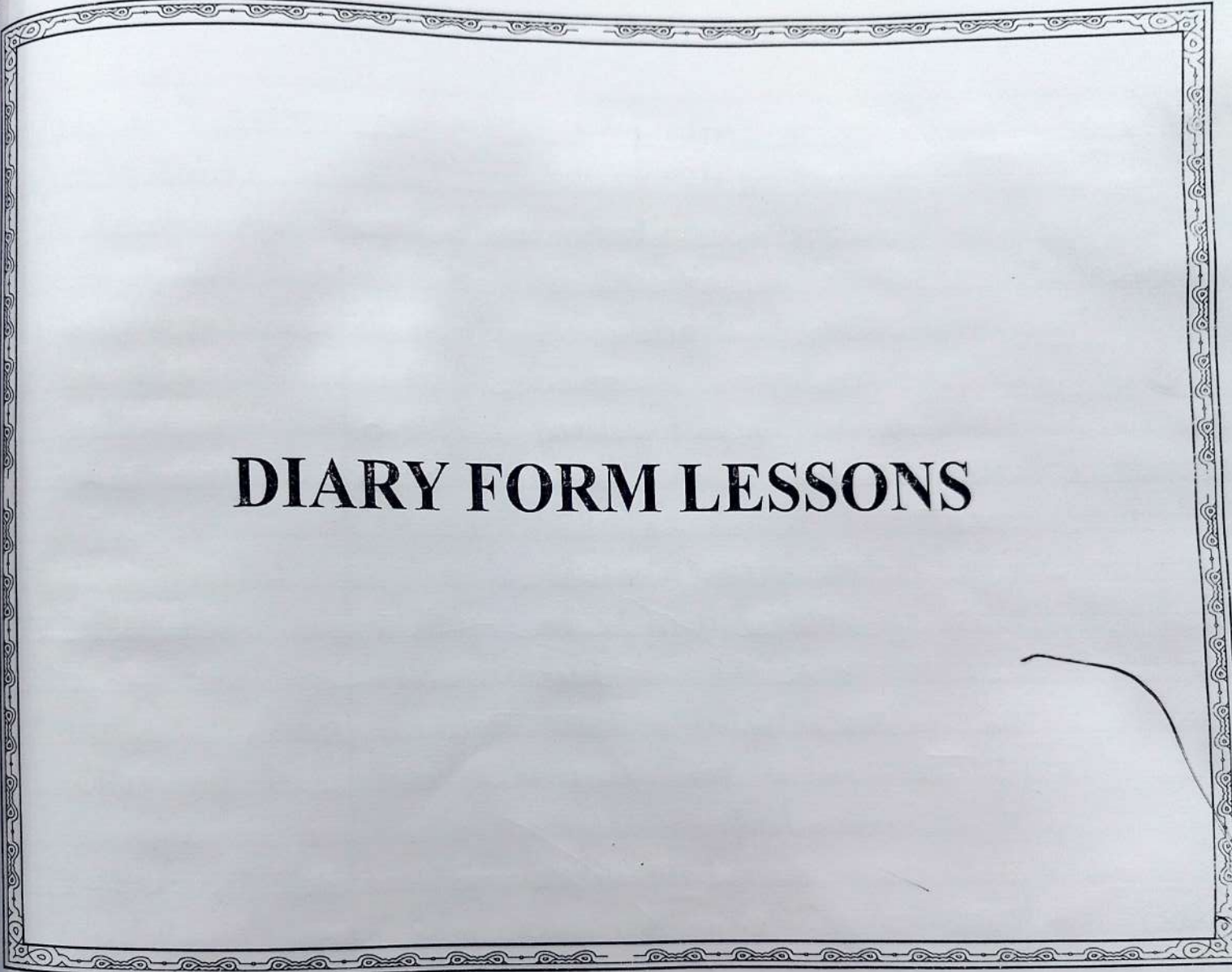
<u>Subject Matter</u>	<u>PT Activity</u>	<u>Pupil Activity</u>	<u>Teaching Aids</u>	<u>Blackboard Summary</u>
<u>Storage & Management</u> • Use of airtight containers and granaries to protect from moisture and insects.	PT will Explain about Storage & Management of food.	Pupil will note down important Information.		<u>Management Crops:-</u> Crops are managed in granaries.

Recapitulation:-

1. What is crop?
2. Give examples of Kharif & Rabi crop.

Home Assignment:-

1. Write a short note on the basic practices of crop production.
2. Differentiate between Kharif & Rabi crops with examples.

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DIARY FORM LESSONS

PT Roll no. :- 2025101

Subject :- Science

Topic :- State of Matter

Class :- 8th

Date :-

Duration :- 40 min

Instructional
Objectives :-

After the completion of this lesson, students will be able to

1. Define matter and explain its meaning.
2. Identify and describe the three main states of matter - solid, liquid and gas.

Instructional
Aids :-

1. Charts showing three states of matter.
2. Diagrams of particle arrangement in solid, liquid & gases.
3. Blackboard drawing of molecules.

Previous Knowledge
Assumed :-

Students already know :-

1. Everything around us is made of matter.
2. Matter can be touched, seen & felt.

PK Testing :-

1. What is matter?
2. Can you name some things around you that are made of matter?
3. What happens when ice is kept outside in the sun?

Announcement of

Topic :-

Instructional
Strategies :-

well students Today we will learn about
"State of matter".

Inductive method, Demonstration method,
Brainstorming, Picture method will be used.

Teaching Point	Instructional Objectives	Instructional Strategies	Resource Material	Evaluation Strategies
Meaning & Definition	Students will be able to define matter	Lecture Method	B.O writing	What do you mean by matter?
States of matter	Students will be able to name various states of matter	Lecture method	PPT	Name various state of matter
Definition of solid	Students will be able to define solid	Lecture method	Blackboard writing	What do you mean by solid?

Teaching Point	Instructional Objectives	Instructional Strategies	Resource Material	Evaluation Strategies
Definition of solid & liquid.	Students will be able to define solid and liquid.	PPT	lecture, method	what do you mean by gases. gives ex.

Recapitulation :-

1. Give two properties of solid, liquid and gas.
2. Molecules packed in solid, liquid & gas.

Home Assignment :-

1. Define Solid.
2. Explain liquids with example
3. Give some examples of gases.

✓
RLL

PT Roll no :- 2025101

Subject :- Science

Topic :- Magnet

Class :- 6th

Date :-

Duration :- 40 min

Instructional Objectives :-

After completing this lesson, Students will be able to:-

1. Identify magnetic and non-magnetic materials
2. observe how magnets attracts or repel object

Instructional Aids :-

1. Magnetic cube model.
2. Iron nails, pins, plastic items, ~~plastic~~ paper clips.

Previous Knowledge Assumed :-

Students have already seen or played with magnets and know that some object stick to them

Pk Testing :-

1. Have you ever seen a magnet?
2. Which object stick to a magnet?
3. Does a magnet attract all materials?

Announcement of
Topic &
Instructional
Strategies &

Well Students today we will learn about
'Magnetism'
Story Telling, Inductive method, Demonstration
method will be used.

Teaching Points	Instructional Objectives	Instructional Strategies	Resource Material	Evaluations Strategies
History of magnet	learner will be able to recall about magnet	Story Telling	PPT	Has the magnet was discovered.
Magnetic & Non-magnetic material	learner will be able to clarify magnetic & non-magnetic material.	Inductive method	Real Objects	clarify magnetic & non-magnetic materials
Poles of magnet	The Students will be able to Explain the poles of magnet	Activity & Demonstration method	Real Material	PT will bring a magnet close. How many poles exists.

Teaching Point	Instructional Objectives	Instructional Strategies	Resource material	Evaluation strategies
Attraction & Repulsion between Magnets	Students will be able to observe attraction & repulsion between magnets.	Demonstration Method.	Real objects	PT will bring 2 magnets close & ask what was observed.

Recapitulation:-

1. what is Magnet?
2. Name three magnetic materials?
3. what happens when like poles of magnet come close?

Home Assignment:- Make your own magnet at home using a needle & a magnet.

RK

PT Roll no. - JD23101

Class - 6th

Subject - Science.

Date -

Topic - Food - Where does it come from? Duration - 40 min

Instructional Objective :-

- At the end of lesson students will be able to
1. To know source of food.
 2. They will be able to differentiate between different source of food.

Instructional Aids :-

Chart Related topic.

Previous Knowledge Assumed :-

Students should know that food is essential for all living beings. They should be aware about some common food items like rice, milk etc.

PK Testing

Did you know from where we get the food we eat?

Announcement of

Topic & Instructional Strategies &

So students, let us start with our chapter
"Food: where does it come from".

sec cum demonstration, explanation, questioning
& discussion will be used.

Teaching Point	Instructional objectives	Instructional Strategies	Resource material	Evaluation Strategies
1. Need of food.	Students will understand that all living beings need food for survival growth and energy.	Teacher asks questions about daily meals.	Blackboard, picture of people eating	Why do we need food?
2. Source of food.	Students will identify the two main source - plants and animals.	Teacher display Eg:- carrot, Spinach, rice	Charts showing food items.	Name the two main source of food.
3. Food from Animals.	Students will list food products obtained from animals such as milk, meat, egg, honey	Teacher shows pictures & explain each product & its source	picture of cow, fish, hen etc.	write any two items that get from animals.

Teaching Point	Instructional Objectives	Instructional Strategies	Resource. Material	Evaluation Strategies
4- Food from plants	Students will recognize different plant parts used as food (root, stem, leaf, flower etc.)	Teacher shows pictures & explain each produce example like carrot, flise.	Flash cards	which part of plant do we eat in Carrot & Spinach?

Recapitulation:-

1. How food help us in daily life?
2. which food do we get from plants and animal?

Home Assignment:- So Students, you have to do very short types questions in your fair notebook. That questions we have covered in our today's topic

Rue

PT Roll no - 2025/01

Subject - Science

Topic - Heat

Class - 7th

Date -

Duration - 40 min

Instructional Objectives :-

After the completion of lesson students will able to

1. Define Heat and temperature.
2. Differentiate between heat and temperature
3. Define conductors and insulators.

Instructional Aids :-

→ Chart showing model of heat transfer.
→ Diagram of laboratory thermometer.

Previous Knowledge Assumed :-

Student already know that's
sun give us heat and light.

Pre-Testing :-

Hot object feel warm and cold object feel cool.
How do you feel when you touch a hot object?

Announcement
of Topic
Instructional
Strategies &

Well Students, Today we will study about topic "Heat"

doc cum Demonstration method, questioning, Brainstorming will used.

Teaching
Point

Instructional
Objectives

Instructional
Strategies

Resource
Material

Evaluation
Strategies

1- Introduction
to heat.

Student will understand
that heat is form
of energy

lecture
method

Blackboard,
Harden Demo

what do
you feel
when you
rub your
palm?

2. Measurement of
Heat

Student will identify
how heat is measured
in $^{\circ}\text{C}$ using thermometer

Teacher showing
laboratory
thermometer

Thermometer,
chart.

what
instrument
is used to
measure
temperature?

3. Conductors &
Insulators

Students will classify
material as good or
bad conductor of heat.

Teacher show
metal spoon &
wooden spoon
in hot water

Metal and
wooden spoon

which is a
good
conductor
of heat?

Teaching Point	Instructional Objectives	Instructional Strategies	Resource Material	Evaluation Strategies
4. Modes of Heat Transfer	Students will Explain Conduction, convection and radiation	Demonstrates Conduction, Convection & Radiation	Che candles, metal rod, water beaker lamp.	Name the three modes of heat transfer.

Recapitulation :-

1. What is Heat?
2. What is difference between heat & temp
3. Name three mode of heat transfer.

Home Assignment :- Make a table showing five materials used at home and classify them as good Conductor or Insulator of heat.

File

PT Roll no:- 2023101

Subject:- Science

Topic:- Force & Pressure.

Class:- 8th

Date:-

Duration:- 40 min

Instructional Objectives :-

- At the end of the lesson students will be able to
- (i) The concept of force and its effects
 - (ii) To Explain pressure and factors affecting it.

Instructional Aids :-

- Charts Showing Examples of force & pressure.
- Diagrams (force applied, area effect)
- Balloons, pins, brick for demo.

Previous Knowledge Assumed :-

- Students already know about push and pull.
- Students have seen examples like hammering a nail.

PK Testing :-

What happens when you push a chair?
Why do we use a knife to cut fruits?

<u>Announcement of Topic & Instructional Strategies &</u>	so students let start our new chapter force and pressure. sec cum demonstration method, questioning: Brainstorming will be used.			
Teaching Point	Instructional Objectives	Instructional Strategies	Resource Material	Evaluation Strategies
1. Introduction to force	Students will understand that force is a push or pull acting on object	Teacher pushes & pulls a chair to demonstrate force.	Chair, ball, blackboard.	What is force?
2. Effects of force	Students will identify different effects of force - change in shape, direction or state of motion.	Demonstration	Sponge, foot-ball	Give one example of force.

Teaching point	Instructional objectives	Instructional strategies	Resource Material	Evaluation Strategies
Types of force	Students will learn about contact and non-contact forces.	Demonstration of contact & non-contact force.	Magnet, pins, book	Example of contact & non-contact force

Recapitulation :-

1. What do you mean by force?
2. Give relation between force and pressure?
3. How many types of forces are there.

Home Assignment :- So students you have to prepare any activity to show that air exerts pressure on your notebook.

all

PT Roll no:- 2025101

Class:- 7th

Subject:- Science

Date:-

Topic:- Sound

Duration:- 40 min

Instructional Objectives:-

By the end of the lesson students will be able to

- i) Explain that sound is produced due to Vibrations.
- ii) Identify different source of sound.

Instructional Aids:-

- Tuning fork
- Rubber band stretched on a box
- Metal spoon & glass.

Previous Knowledge Assumed:-

1. Students should be familiar with the concept of energy.
2. They know that sound helps in communication.

PK Testing:-

1. Have you ever heard the sound of bells?
2. Can sound travel through air?

Announcement
of Topic &
Instructional
Strategies &

Today we are going to do learn about topic "Sound".
Secum demonstration method, Brainstorming, discussion will be used.

Teaching Point	Instructional Objectives	Instructional Strategies	Resource material	Evaluation Strategies.
Introduction to sound	Students will understand that sound is a form of energy produced by vibration.	Teacher strikes a tuning fork to show vibration.	Tuning fork, rubber band, metal plate.	What happens when a vibrating object is touched?
production of sound.	Student will observe that sound is produced when an object vibrates.	Teacher shows how sound is made by drum.	Drum	How is sound produced?
3. Pitch, loudness and quality.	Students will differentiate between pitch, loudness, quality.	Teacher plays high & low pitched sounds or uses tuning fork.	Audio clips / tuning fork.	Which sound has higher pitched whistle?

Teaching Point	Instructional Objectives	Instructional Strategies	Resource material	Evaluation Strategies
4. Uses & Importance of sound.	Students will list uses of sound in communication, music & signals.	Class discussion with real life examples like mobile phones, bells, alarms.	chart of uses of sound	Mention any use of sound daily life

Recapitulation :-

1. What causes sound to be produced?
2. Through which medium can sound travel?
3. What happens when sound vibration stops?

Home Assignment :-

1. Explain in short how sound travel through air.
2. Write five examples of sound-producing object and identify their vibrating parts.

all

PT Rollno. B- 2023101

Subject B- Science

Topic B- Light

Class B- 7th

Duration B- 40 min

Date B- "

Instructional Objectives B

By the end of the lesson, students will be able to

1. Define light as a form of energy that enable us to see objects

2. Explain that light travels in straight line

→ plane mirror → Torch or laser light

→ white screen or wall → Chart showing ray diagram

Instructional Aids B-

1. Students have seen their own image in a mirror

2. They have basic idea that light travels in a straight line.

1. Can we see object in a dark room?

2. Does light bend or travel straight?

P.K. Testings B

<u>Announcement</u> of Topic & <u>Instructional</u> Strategies &-	Today we study very interesting topic "light". lec cum demonstration method, Brainstorming discussion will be used.
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Teaching Point	Instructional Objectives	Instructional Strategies	Resource material	Evaluation Strategies
1. Introduction to light	Students will understand that light is a form of energy that enables us to see object.	Demonstrate the need of light.	Torch, dark room, Blackboard.	What helps us to see object?
2 Source of light	Students will identify natural and artificial source of light	Teacher shows pictures & ask students to classify.	chart of sun, stars, bulb, candle	Name to natural & artificial source of light
3. light travel in straight line.	Student will observe that light travels in straight path	Demonstration method	Mirror, Torch, card board with holes.	What happens when one hole is blocked?

Teaching Point	Instructional Objectives	Instructional Strategies	Resource material	evaluation Strategies
Uses of light	Students will list uses of light in daily life and nature	class discussion	Blackboard, chart.	Mention two used of light in daily life.

Recapitulation :-

1. What is light?
2. What is Reflection of light?
3. State two laws of Reflection.

Home Assignment :-

1. Define reflection of light.
2. write two examples where reflection is used in daily life.

RV

PRollno:- 2023101

Subject:- Science

Topic:- Friction

Class:- 8th

Date:-

Duration:- 40 min

Instructional
Objectives:-

After the lesson students will be able to understand:-

- i) Define friction & explain its causes.
- ii) Identify different types of friction.

Instructional
Aids:-

- charts showing types of friction.
- Diagram of force acting on moving object.

Previous Knowledge
Assumed:-

Students should already know the:-
The concept of force & motion
& the cause of friction

PK Testing:-

1. What is force?
2. Why does ball stop rolling after some time?
3. Can an object move without applying force?

Announcement of

Topic

Instructional
Strategies :-

Today we are going to study about very interesting topic "Friction".

Lesson demonstration method, questioning and discussion will be used.

Teaching Point	Instructional Objectives	Instructional Strategies	Resource Material	Evaluation Strategies
1. Introduction to friction	Students will understand that friction is force that oppose the motion	Teacher rolls a ball on a rough & smooth surface to show differences	Ball, smooth surface, rough board.	What happens when the ball moves on rough surface?
2. Cause of friction	Students will learn that friction is caused by irregularities on surface.	Teacher uses magnified images/chart showing rough & smooth surfaces.	Charts showing irregularities of surface.	What causes friction between two surfaces?

Teaching Point	Instructional Objectives	Instructional Strategies	Resource Material	Evaluation Strategies
3. Factor affecting friction	Students will identify factors such as nature of surface	Teacher slides obj. of diff. weight & on various surfaces.	Wooden block, Sandpaper, Smooth Surfaces.	Does friction increase on rough surfaces?

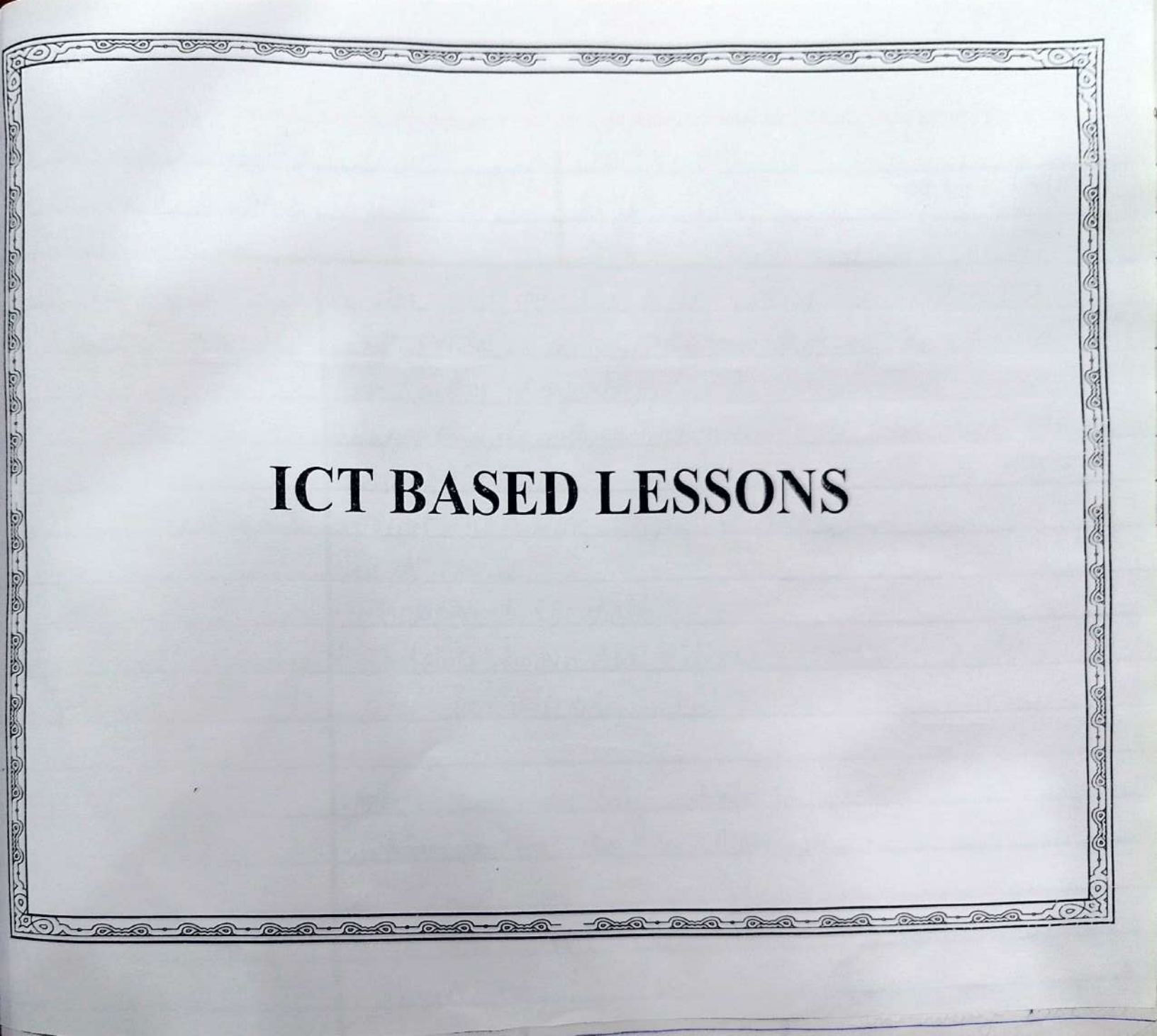
Recapitulation:

1. What is frictional force?
2. How many types of friction are there?
3. Write the advantages & disadvantages of friction

Home Assignment:

So students, you have to write difference between types of friction on your notebook.

PL

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ICT BASED LESSONS

PT Roll no.:- 2025101

Subject:- Science

Topic:- Disease

Class:- 6th

Date:-

Duration:- 40min

Instructional
Objectives:-

By the end of the lesson, students will be able to -

1. Define disease as a condition that affects normal functioning of the body.
2. Differentiate between communicable and non-communicable diseases.

Instructional Aids:-

3. chart showing types of diseases.

- flash cards
- Blackboard & chalk

Previous Knowledge
Assumed:-

1. Students know the difference between healthy and sick individuals.

PK Testing:-

- What can we say when a person is ill.
- What do we do to cure the disease.

Announcement of
Topic:-

well students; today we will learn about topic "Disease".

Instructional Strategies &

lecture cum demonstration method, discussion method, Activity Based method will be used.

Subject Matter

PT Activity

Pupil Activity

GLT Work

Disease :- It is an abnormal function of an organism or a part especially as a result of infection

PT will explain about disease.

Pupil will listen carefully.

PPT

Types of Disease

PT will explain about types of disease.

Pupil will maintain discipline

Communicable disease :-

These are caused by a pathogens. viruses, bacteria. In other words these are diseases from one

Subject Matter

PT Activity

Pupil Activity

ICT Work

person to other person
example :-
Typhoid.

pupil will
understand
the theory

PPT.

non-communicable diseases:-

chronic conditions that
cannot be spread from
person to person.

PT will explain
about non-comm-
unicable diseases

Example:- cancers,
chronic respiratory
diseases and diabetes.

Recapitulation :- 1. What is a disease?

2. Name two communicable diseases.

3. Name two non-communicable diseases.

Home Assignment :- 1. Make a chart of 5 communicable and 5 non-communicable diseases.

2. Explain any two methods of preventing communicable diseases.

pl ✓

PT Roll no. :- 2095101

Class :- 7th

Subject :- Science

Date :-

Topic :- Movement of Body

Duration :- 40 min

Instructional Objectives :-

By the end of the lesson, students will be able to

1. Define movement and locomotion.
2. Identify different body parts involved in movement.
3. Explain the role of muscles and bones in movement.

Instructional Aids :-

- 1) Model of human skeleton or chart
- 2) Blackboard & chalk

Previous Assumed Knowledge :-

- 1) Students know that bones and muscles are parts of our body.
- 2) They have seen animals moving in different ways.

PK Testing :-

- 1) Can you bend your elbow? Which part helps you bend it?
- 2) How do you walk from one place to another?
- 3) Do all animals move the same way?

Announcement of Topic :-

Well student, Today we will study Movement of Body and how humans and animals move with the help of bones muscles, and joints."

Instructional Strategies

Lecture and demonstration method, Discussion method, Activity Based method will be used.

<u>Subject Matter</u>	<u>PT Activity</u>	<u>Pupil Activity</u>	<u>SET</u>
1) Movement: Change in position in position of the body or its parts.	PT will Explain about the movement.	pupil will understand the concept.	
2) Locomotion: Movement from one place to another.			
3) Bones and muscles: 1) Bones Give shape and support 2) Muscles help bones to move	PT will tell about bones and muscles	pupil will maintain discipline	
Joints and types: 1) Ball and socket joint - Shoulder, hip. 2) Hinge joint: knee, elbow			

<u>Subject matter</u>	<u>PT Activity</u>	<u>Pupil Activity</u>	<u>ICT Work</u>
1) Pivot joint - neck			
2) fixed joint - Skull			
3) Movement In Animals: 1) Earth worm - muscles contract and relax	PT will Explain about	pupil will write down important notes on	
2) Snail - muscular foot.	Movement in	their	
3) fish - fins and tail for swimming.	Animals.	notebook.	
4) Birds - wings and light bones.			
5) Snake - loops of body for slithering.			

Recapitulation &

1. What is movement?
2. What do you know about locomotion?
3. How many bones are there in human?

Home Assignment &

Solve the back exercise of the chapter.

Re

Roll no :- 2025101

Subject :- Science

Topic :- Combustion

Class :- 7th

Date :-

Duration :- 40 min

Instructional
Objectives :-

By the end of the lesson, students will be able to -

1. Define combustion and explain the conditions necessary for combustion.

2. Candle and matchstick.

• Blackboard and chalk.

Previous Assumed
Knowledge :-

1. Students know how objects like candles or wood burn.

2. They understand that fire needs certain conditions

1. Have you ever lit a candle?

2. What do you need to light a matchstick?

3. Can wet wood burn easily? why not?

Announcement of
Topic :-

Well students, "Today we will learn about combustion, how substances burn, and the conditions required for burning."

Instructional Strategies:-

lecture cum demonstration method, Discussion method, Activity Based method will be used.

<u>Subject Matter</u>	<u>PT Activity</u>	<u>Pupil Activity</u>	<u>ICT Work</u>
<u>Combustion</u> :- A chemical reaction in which a substance reacts with oxygen to give off heat.	PT will explain about Combustion	• Pupil will sit properly in the class.	PPT
<u>Types of Combustion</u>	PT will explain type of Combustion	• pupil will listen carefully.	
1. <u>Rapid Combustion</u> • A type of combustion where a substance burns quickly, releasing heat and light. eg:- Burning of	<u>I</u> Rapid Combustion		

<u>Subject matter</u>	<u>PT Activity</u>	<u>Pupil Activity</u>	<u>ICT Work</u>
natural gas or LPG in stove.			PPT
2. <u>Spontaneous Combustion</u> :- A substance catches fire on its own without any external ignition source. Eg- white phosphorus in air.	PT will Explain about spontaneous Combustion.	pupil will understand properly types of Combustion Pupil will maintain discipline.	
3. <u>Explosive Combustion</u> A very rapid Combustion that happens suddenly. Eg A firecracker Exploding	PT will Explain about Explosive Combustion.		

Recapitulation :-

- ① Define Combustion
- ② Explain types of temperature?
- ③ Explain about Explosive Combustion?

Home Assignment :- PT will give home assignment to learn about types of Combustion.

PL

Roll no - 2025101
Subject - Science
Topic - Windstorm

Class - 7th

Date -

Duration - 40 min

Instructional
Objectives :-

By the end of the lesson, students will be able to -

1. Define wind and storm.
2. Explain how air pressure affects the movement of air.

Instructional
Aids :-

- Chart showing air pressure and wind formation
- Blackboard & chalk.

Previous Knowledge
Assumed :-

1. Students have experienced wind blowing outside.

Pk Testing :-

Announcement of
Topic :-

Well Students, Today we will learn about Topic "windstorm".

Instructional Strategies :-

recum demonstration method, Discussion method, Activity-based method will be used.

<u>Subject Matter</u>	<u>PT Activity</u>	<u>Pupil Activity</u>	<u>ICT Work</u>
<u>wind</u> :- Moving air is called wind. This movement occur as air flows from area of high pressure to areas of low pressure.	PT will give introduction on wind.	pupil will listen carefully.	PPT
<u>Thunderstorm</u> :- It is usually developed in hot humid tropical areas like India	PT will tell about Thunderstorm	Pupil will maintain discipline	

<u>Subject Matter</u>	<u>PT Activity</u>	<u>Pupil Activity</u>	<u>ICT work</u>
<u>Tornado</u> - It is storm with a dark funnel shape that reaches the ground from sky.	PT will tell about Tornado	pupil will try to understand the difference between all the types of wind storm.	PPT
<u>Cyclone</u> - A cyclone is a storm system that causes destructive winds & air circulation around a low pressure at centre.	PT will tell about cyclone.		

Recapitulation :- Teacher asks brief oral questions

- what is wind?
- why does air move?
- what is difference between a storm and a cyclone?

Home Assignment :- • prepare a chart showing safety precautions during storms and cyclones.

20

PT Roll no. B-9095101

Class B- Science

Topic B- Sound

Class B- 7th

Date B-

Duration B- 40 min

Instructional Objectives B-

By the end of the lesson, students will be able to

1. Define sound as a form of energy produced by vibrations.

• Tuning fork

• Blackboard and chalk

• Chart showing human ear

Instructional Aids B-

Previous Knowledge Assumed B-

1. Students have heard different types of sound around them.

2. They know that sound is used for communication.

Pr. Testing

1. What happens when you pluck a rubber band? Does it make a sound?

Announcement of Topic

"Today we are going to learn about sound how it is produced, how it travels, and its different characteristics."

Instructional Strategies :- Lecture cum demonstration method, Discussion method, Activity Based method will be used.

<u>Subject Matter</u>	<u>PT Activity</u>	<u>Pupil Activity</u>	<u>ICT Work</u>
1. Definition of Sound • Sound is a form of energy produced by vibrating objects.	PT will Explain about sound.	Pupil will understand the definition of sound.	PPT
2. Vibration • Rapid back-and-forth movement creates sound. • Example: Tuning fork, rubber band, guitar string.	PT will explain about vibration.	Pupil will maintain discipline.	

<u>Subject Matter</u>	<u>PT Activity</u>	<u>Pupil Activity</u>	<u>ICT Work</u>
3. Characteristics of sound • Loudness - depends on amplitude. • Pitch - depends on frequency	PT will explain about characteristics of sound	Students will write the important points on their notebook	PPT
4. Sources of sound • Musical instruments, human voice box (larynx) everyday objects.	PT will explain about sources of sound		
5. Human Ear • Helps us hear sound (outer ear → middle ear → inner ear)	PT will explain about Human ear		

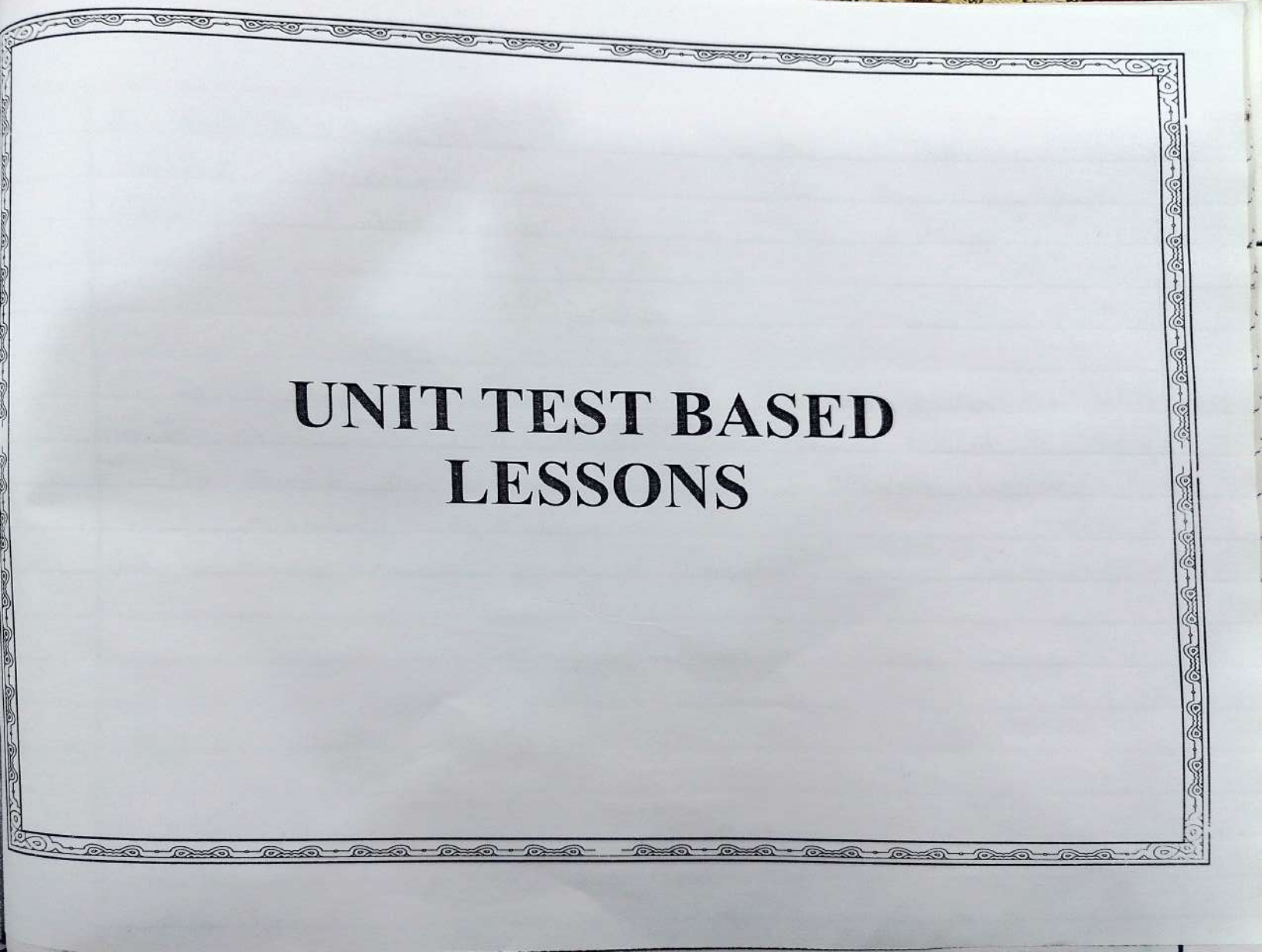
Recapitulation :-

1. What is sound?
2. What is needed to produce sound?
3. What do you mean by vibration?
4. Through which mediums can sound travel?

Home Assignment :-

1. Write the definition of sound and vibration.
2. Draw and label a diagram of any sound-producing object.
3. List five sources of sound you hear in daily life.
4. Explain in 4-5 lines how sound travels through air.

plc

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UNIT TEST BASED LESSONS

PT Roll No :- 2085101

Subject :- Science

Topic :- Acid & bases

Class :- 7th

Date :-

Time :- 40 min

-: Objectives :-

- (i) To check the knowledge of students related to topic
- (ii) To check the understanding of students related to topic
- (iii) To develop the interest of students towards science & developing scientific attitudes.
- (iv) To develop critical & logical thinking among students.

Knowledge Domain

Objective type questions $\Rightarrow$

- (i) Bases reacts with acids to give & water.
- (ii) Acids turns litmus to
- (iii) Bases turns litmus to
- (iv) HCl & HNO_3 are

Short Answer type questions

- i) Define Acids.
- ii) Differentiate b/w Acids & bases.
- iii) Give two examples of bases.

Understanding Domain

Short answer type questions :-

- i) What happens when base is added to phenolphthalein?
- ii) List two properties of each acid & bases.
- iii) What will be the product in this reaction
$$\text{Zn(OH)}_2 + \text{HCl}$$

Application Domain

- i) If you are given a flask containing a compound, then how will you check that it is an acid or base.

Evaluation Domain

Match the Column $\Rightarrow$

(i) NaOH

(a) Greater than 7

(ii) Acid + base

(b) Base

(iii) PH of neutral solⁿ

(c) Salt & water

(iv) PH of base

(d) 7

Creativity Domain

check from the PH value of substances chemical of all around you in daily life was with litmus paper or universal indicator & make a list of it's.

RL

PT Roll No - 2025101 class - 7th
Subject - Science Period - 7
Topic - Balanced Diet Time - 40 min

Objectives

1. To check knowledge of students related to topic.
2. To check understanding of students related to topic.
3. To check whether students will be able to apply gained knowledge in real life.
4. To able the students conscious about balanced diet.
5. To enable the students to classify different components of balanced diet.

Knowledge Domain

very short type Questions :-

1. What do you mean by balanced diet?
2. Why we take balanced diet?
3. How many types of vitamins are there.

Understanding Domain

Short answer type Questions

1. Write sources of fat.
2. Give examples of carbohydrates.
3. Write names of some minerals.

Application Domain

1. If there is no cooked food for a day in your home, then how will you arrange a balance diet.
2. If you are staying away from home & the diet is not good there then what will you do?

Evaluation Domain

Match the column

(i) Sodium

(a) vitamin

(ii) Vitamin

(b) Protein

(iii) Sugar

(c) water soluble

(iv) Soybean

(d) minerals

Creative Domain

- (i) Make a list of vitamins & their sources with good collections of sources products.

RK

PT Roll No :- 2025101

Subject :- Science

Topic :- Our environment

class :- 9th

M.M :- 30 Marks

Time :- 40 min

Instructions

1. Q. Paper contains total 12 questions.
2. All questions are compulsory.
3. Do all questions in serial order.
4. No extra time is allotted.
5. Writing should be clear.

Knowledge Domain

True / false :-

5 x 2 = 10

- (i) Ozone layer is beneficial for us. (T/F)
- (ii) Plants are known as producers. (T/F)

3. Plants are main sources of Carbohydrates. (T/F)

4. Polluted gases are harmful for environment. (T/F)

5. CO_2 , CH_4 , NO_2 are green house gases. (T/F)

Understanding Domain

3 × 2 = 6

1. How we have to manage garbage?

2. What are biodegradable substances?

3. Which factors depleted Ozone layer? Write their Names.

Application Domain

2 × 3 = 6

1. How plants are useful for environment?

2. Explain Environment problems with examples.

Analysing

1 × 3 = 3

1. How Ozone layer protect the organisms from harmful factors ?

Evaluating

1. Explain green house effect with help of Diagram.

Rel

DISCUSSION LESSON

PT Roll no. :-

Subject :- Science

Topic :- Motion and its types.

Class :- 7th

Duration :- 40min

Date :-

Instructional
Objectives

After the completion of lesson students will be able to :-

- i) Students will define motion.
- ii) Students will list the types of motion.

Instructional
Aids &

- Chart showing different types of motion.
- Blackboard and Chalk.

Previous Knowledge
Assumed :-

- i) Students have seen many objects moving in daily life.
- ii) Students know that objects change position when they move.

Previous Knowledge
Testing :-

1. Have you seen a car or bus moving on the road?
2. What happens when fan is switched on?

Announcement of
Topic :-

Well students, today we are going to learn about motion & its types.

Instructional Strategies :-

lecture method, discussion method, Explanation method, demonstration method will be used.

Subject Matter	PT Activity	Pupil Activity	Teaching Aids	Blackboard Work
<u>Definition of Motion</u> An object is said to be in motion if it changes the position w.r.t time.	PT will Explain the concept of motion.	Students will observe teacher's demonstration		
<u>Example of Motion :-</u> (i) Moving car (ii) Running boy (iii) Flowing water (iv) Spinning top	PT will tell examples of motion	Pupil will listen carefully.		

Subject Matter	PT Activity	Pupil Activity	Teaching Aids	Blackboard Work
<u>Types of Motion</u> <u>1. Linear motion</u> when an object moves in straight line. Eg:- Train moving on straight tracks.	PT will move across the classroom to show linear motion.	pupil will try to understand the types of motion.		
<u>2. Circular motion</u> when an object move along a circular path. Eg:- Blades of fan	PT will explain about circular motion	pupil will write on their notebooks.		

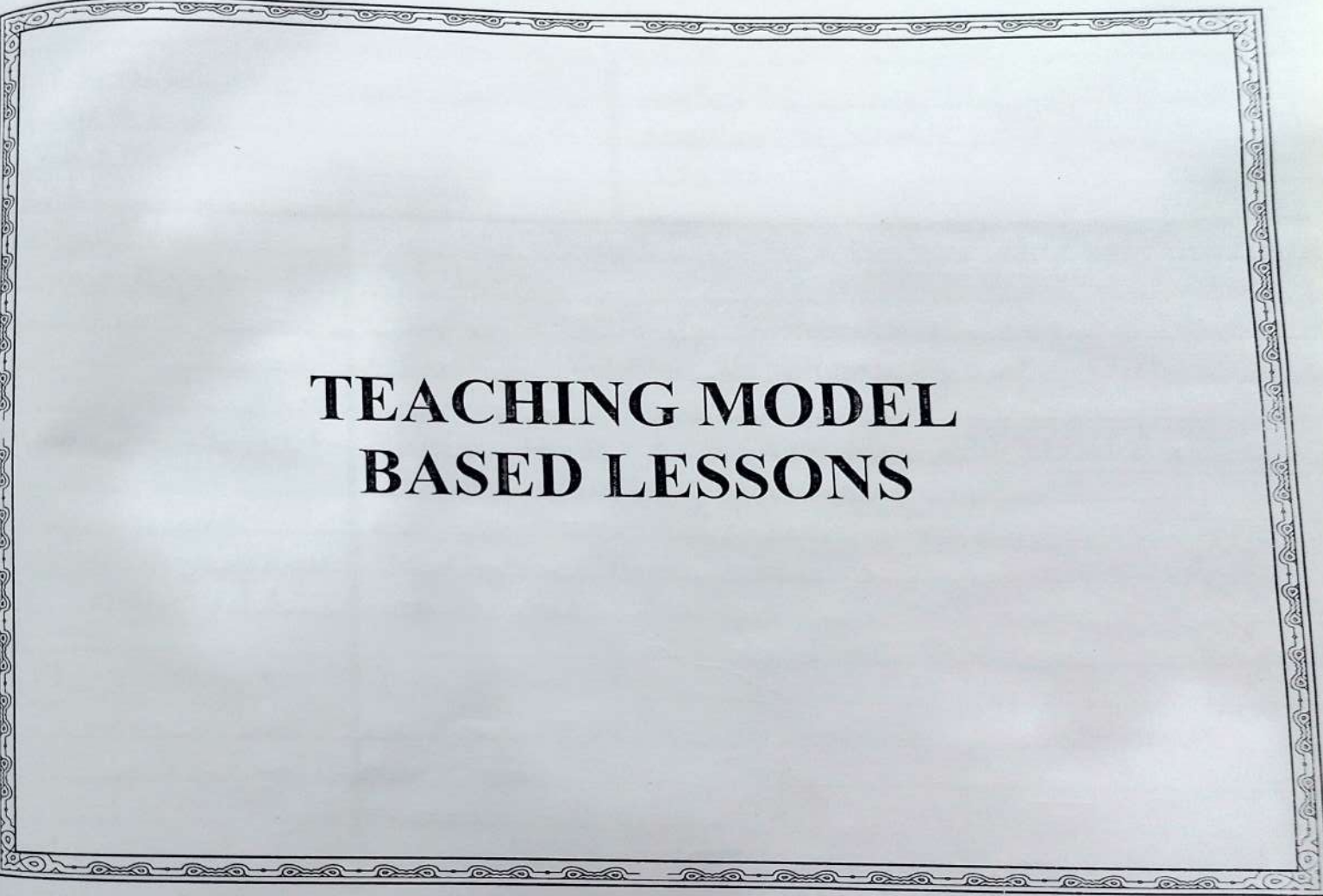
Sectional Recapitulation:-

1. What is linear motion.
2. Give any two examples of circular motion seen in daily life.

Subject matter	PT Activity	Pupil Activity	Teaching Aid	Blackboard work
<u>Rotational motion</u> Motion that repeats after a fixed interval of time. Eg:- Heartbeat.	PT will tell about rotational motion	pupil will maintain discipline		
<u>Oscillatory motion</u> To and fro motion about a mean position. Eg:- pendulum.	PT will explain other ^{types} examples of motion	pupil will understand the types of motion		
<u>Random motion</u> Motion that have no fixed path. Eg:- flying insect.				

Final Recapitulation :- 1. Motion is the change in position of an object with respect to time.
2. Object around us show different types of motion depending on their path & movement.

Home Assignment :- 1. Define Motion.
2. Give one example of circular motion.
3. Write one example of oscillatory motion.

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TEACHING MODEL BASED LESSONS

PT Roll no. - 2025101
Subject - Science
Topic - Electricity

Date -
Duration - 40 min
Class - 9th

Instructional objectives -

After the completion of lesson students will be able to -

- Define electricity conduction and insulators
- Identify Explain the working of electric circuit

Instructional Aids -

A well equipped classroom, blackboard, chalk, duster, pointer.

Previous Knowledge Assumed -

Students have basic knowledge about light and its source.

PK Testing -

1. Have you seen bulbs glowing at home?
2. From where do we get electricity?

Instructional Strategies -

Explain demonstration method, questioning, Demonstration and discussion will be used

Announcement of
Topic

well students, today we will study about topic "Electric Circuit".

Subject Matter

Electric Circuit :- A continuous and closed path of an electric current is called electric circuit.

Electric Current :- It is expressed by an amount of charge flowing through a particular area in a unit time.

It is denoted by I

$$I = \frac{Q}{T}$$

where $Q \rightarrow$ charge, $T \rightarrow$ Time.
Its SI unit is Ampere (A).

PT Activity

PT will explain the pupil about electric circuit by giving example of switch board.

PT will explain the concept of electric circuit to students.

PT will tell the formula and units of electric current.

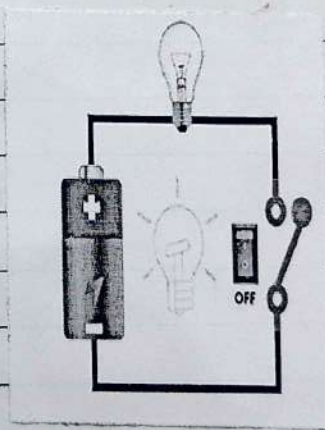
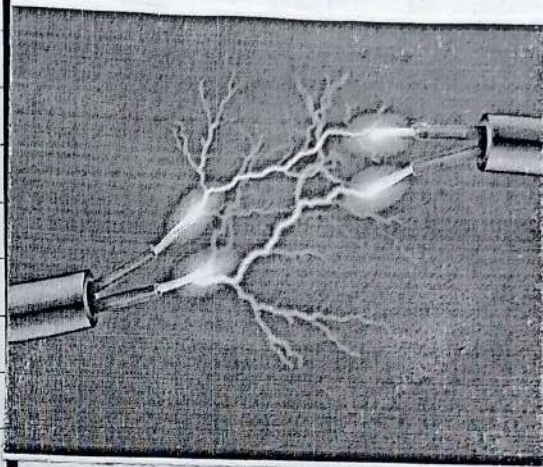
Pupil Activity

Students will listen carefully and write the definition on their notebook properly.

pupil will clear their doubt respectively.

pupil will write down on their notebooks.

Teaching Aids



Blackboard work

Electric Current

$$I = \frac{Q}{T}$$

where :-

$Q \rightarrow$ Charge

$T \rightarrow$ Time

S.I unit is Ampere. (A)

- Recapitulation :-
1. what is electric current.
 2. write formula of electric current.
 3. write S.I unit of
 - i) charge.
 - ii) current.

Homework :- So students you have to draw the diagram of electric circuit in notebook.

✓
Rle

PT Roll no - 2025101
Subject - Science
Topic - Human eye

Date :-
Duration :- 40 min
Class :- 7th

Instructional Objectives :-

After the complete of the lesson, students will be able to:

1. Describe the structure of the human eye
2. Identify the main parts - cornea, iris, pupil, lens, retina, optic nerve.

Instructional Aids :-

- chart / model of human eye.
- Diagram on blackboard
- Smart board / ppt

Previous knowledge Assumed :-

- Students already know about sense organ
- Students have basic knowledge of Reflection and Refraction of light

PK Testing :-

- What is function of light in seeing things?
- Which organ help us to see objects around us?

Instructional Strategies :-

lecture demonstration method, questioning and discussion will be used.

Announcement of Topic

Today ~~why~~ we are going to learn about
Topic Human eye.

Subject Matter

Main part of our eye is eye ball
which is covered by upper
eye-lid & lower eye-lid

Eye ball has three layers :-

1. Sclerotic

2. Choroid

3. Retina

We should take care of our
eyes.

Avoid Reading in dim light

PT Activity

P.T will ask students to
sit properly & listen carefully

P.T will tell students about
parts of eyeball.

P.T will explain students to
take care of their
eyes.

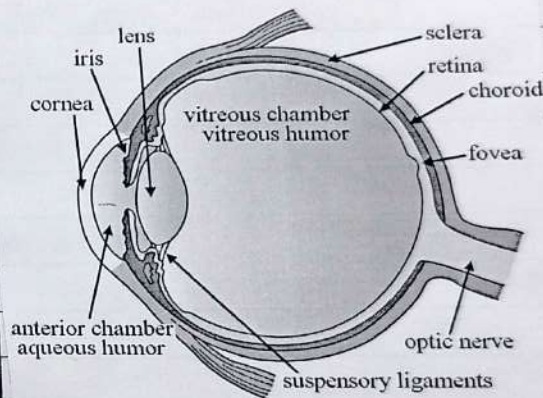
Pupil Activity

Pupil are sitting properly in the class

Pupil were clearing their doubts respectively.

Pupil will listen carefully & note down on their notebook properly.

Teaching Aids



Black Board work

layers of
Eye ball

- ① Sclerotic
- ② Choroid
- ③ Retina

Recapitulation :-

- Q. 1. What is main part of eye?
- Q. 2. How many layers does eye ball have?
- Q. 3. What is the least distance of vision of a healthy eye?

Homework :-

Draw a well labelled diagram of eye on your notebook.

200

PT Roll no:- 2025101

Subject:- Science

Topic:- Force & its types

Date:-

Duration:- 40 min

Class:- 7th

Instructional Objectives:-

- Student will be able to:
- Define force.
 - Understand that force can change the state of motion and shape of objects.

Instructional Aids:-

- Black board and chalk
- Spring, rubber band, ball
- Magnet and iron pieces

Previous knowledge Assumed:-

Students know:

- Motion
- Push and pull actions in daily life
- What happens when you push a door?
- What happens when you pull a chair?
- What is common in pushing and pulling?

PK Testing:-

Instructional Strategies:-

- IECUM demonstration method, questioning and discussion will be used.

Announcement of Topic

Today ~~why~~ we are going to learn about
Topic force & its types.

Subject Matter

Any push or pull which acts
on a body which either
generates motion in it or
stops it is called force.
i.e. pushing a bone, pulling
a cart.

Type of forces

1. Contact forces.
2. Non - Contact forces.

Force per unit area is
known as pressure.

PT Activity

P.T will ask students to
sit properly in
class.

P.T will Teach about force.

P.T will explain types of
~~force~~ force with suitable
examples.

Pupil Activity

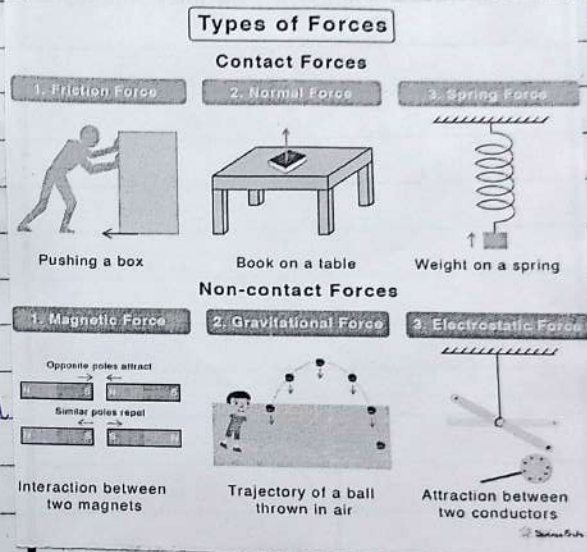
Pupil will sit properly in class

Pupil will listen carefully.

Pupil will understand the topic carefully.

Pupil will clear their doubts.

Teaching Aids



Types of forces

- ① Friction force
- ② Normal force
- ③ Spring force
- ④ Magnetic force
- ⑤ Gravitational force
- ⑥ Electrostatic force

Recapitulation :-

1. What do you mean by force?
2. Give Relation b/w force & Pressure.
3. How many types of forces are there.

Home work :-

so students you have to prepare any activity to show that air exerts pressure on your face notebook.

RM