

LESSON PLAN

DATE-
SUBJECT: SCIENCE
TOPIC: FUNCTIONAL GROUPS

CLASS- 10th
PERIOD-
DURATION-35 MIN.

GENERAL OBJECTIVES:-

- To develop scientific attitude.
- To develop the practical approach.
- To understand the concept of IUPAC nomenclature.
- To acquire knowledge of various functional groups present in carbon compounds.

TARGETTED LEARNING OUTCOMES;

1. COGNITIVE DOMAIN:

A. Knowledge

- a. List various functional groups present in carbon compounds.
- b. Name the given carbon compound.

B. Understanding

- a. Draw the structure of a given carbon compound.
- b. Identify the functional group present in a given carbon compound.

C. Application

Explain the rules for naming the carbon compounds and to draw their bonding structure.

2. AFFECTIVE DOMAIN: Students will be able to give a presentation on various functional groups.

PSYCHOMOTOR DOMAIN: Students will be able to complete their given worksheet itself.

➤ **ICT USED:-** Power-Point presentation

➤ **ASSUMED PREVIOUS KNOWLEDGE:-**Students have the knowledge of term homologous series and functional groups.

➤ **PREVIOUS KNOWLEDGE TESTING:-**

Ques-1. What is valency of carbon?

Ques-2. What are covalent compounds?

Ques-3. What is Homologous series?

Introduction of lesson

<u>Teaching Point</u>	<u>Teaching – Learning process</u>
Halide { Halo group }	i) Halide (Halo Group) : Cl , Br (Names end with –ane) E.g. CH_3Cl – chloromethane , $\text{C}_2\text{H}_5\text{Br}$ – bromoethane
Alcohol	ii) Alcohol : -OH (Names end with – ol) E.g. $-\text{CH}_3\text{OH}$ (Methanol)
Aldehyde	iii) Aldehyde : - CHO (Names end with –al)

Carboxylic acids	E.g. -HCHO (Methanal) iv) Carboxylic acids : -COOH (Names end with –oic acid) E.g. HCOOH (Methanoic acid)
Ketone	v) Ketone : -CO- (Names end with –one) E.g. CH ₃ COCH ₃ (Propanone) WORKSHEET

- Summarization: Repeat all the main points to summarize the concept.
- Interdisciplinary approach: Students will use their art skill to make bonding structure and mathematical skill to calculate the no. of carbon and hydrogen bonds in a given compound.
- Real life skill: Students learn the basic life skill – how to give names to carbon compound containing functional groups.
- Self assessment: Students can ask questions and make queries on the concept they do not understand. Such can be relooked and learnt with the teachers help.
- Evaluation: Teacher will ask to complete worksheet to evaluate the performance of students.
- Home assignment : Completion of worksheet

TEACHER SIGNATURE

PRINCIPAL SIGNATURE

Sciencerekha