

Unit :Structure of an atom

Sub-units:

1. What are matter made up of?
2. What does atom consists of?
3. What are charged particles?
4. Atomic models
 - 4a. JJ Thomson
 - 4b. Rutherford
 - 4c. Chadwick
 - 4d. Bohr
5. Electron distribution
6. Valency
7. Atomic mass and number
8. Electronic configurations

Lesson plan – Bohr’s Atomic Model

Content analysis	Instructional objectives	Teachers’ activity	Students’ activity	Evaluation
Engaging the students Introducing the topic of food to the class	Student defines atom	“Students today, we will learn an interesting topic in Physics. What is matter made up of?” “What does the atom consist of?”	“Matter is made up of atoms” “Protons, electrons and neutrons.”	By prior knowledge
Topic declaration/ statement of aim In this unit, we will explore How the atoms are stable?				
Development 1. charged particles	Student identifies the concept of charged particles	“Students I will show you an experiment. Observe and tell me what you learnt.” (comb and paper experiment gif)	“The paper pieces are attracted to the comb because of charged particles”	Ask examples of similar type
Atomic models 1. JJ Thomson 2. Rutherford 3. Chadwick 4. Bohr	Students identify the methods of how subatomic particles were found	Experiments of Thomson, Rutherford, Chadwick are shown with the help of videos	Students identify the failures in these experiments	Students share their findings

