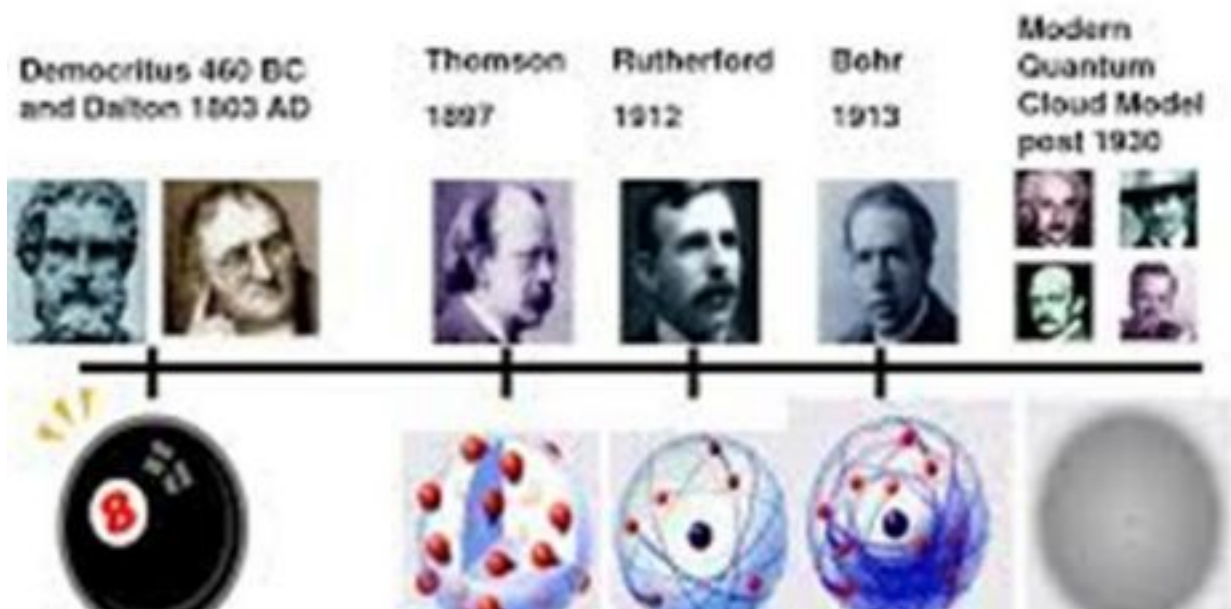


HISTORY OF STRUCTURE OF ATOM

TOPIC : STRUCTURE OF ATOM AND
NUCLEAR ENERGY

75 MINUTES

History of the Atom Timeline





OVERVIEW: STUDENTS WILL USE THE GOOGLE EARTH PROJECT, TO STUDY THE TIEMLINE OF HISTORY OF STRUCTURE OF ATOM USING GOOGLE EARTH PROJECT [ITIME LINE - STRUCTURE OF ATOM](#) (AND OTHER SOURCES TO UNDERSTAND THE CONNECTION BETWEEN GLOBAL POPULATION GROWTH AND INCREASING THREATS TO THE ENVIRONMENT AND EVALUATE EFFORTS TO REDUCE THEM.

SUBJECT/TOPIC:

CHEMISTRY/ENVIRONMENTAL CHEMISTRY

LEARNING OBJECTIVES:

- STUDENTS WILL APPRECIATE THE VARIOUS THEORIES OF ATOM PROPOSED BY DIFFERENT SCIENTIST
- STUDENTS WILL DEEPEN THEIR UNDERSTANDING OF THE DRAWBACKS OF EACH THEORY OF STRUCTURE OF ATOM
- STUDENTS WILL RESEARCH LATEST THEORY PROPOSED TO EXPLAIN THE STRUCTURE AND STABILITY OF ATOM
- STUDENTS WILL RESEARCH ON VARIOUS CONVENTIONS ON NUCLEAR ENERGY

MATERIALS NEEDED:

- ACCESS TO [GOOGLE EARTH](#).
- STUDENT COPIES OF THE

<https://www.compoundchem.com/2016/10/13/atomicmodels/>

- STUDENT INTERNET ACCESS.
- ADOBE FLASH PLAYER VERSION 10.2.S

GRADE LEVEL:

9TH -12TH GRADE

LESSON SUMMARY:

- ENGAGE: APPRECIATE THE VARIOUS THEORIES ON STRUCTURE OF ATOM
- EXPLORE: UNDERSTAND THE DRAWBACKS OF VARIOUS STRUCTURES OF ATOMS
- EXPLAIN: RESEARCH THE LATEST THEORY ON STRUCTURE OF ATOM.HOW DISCOVERY OF NUCLEAR ENERGY HAS IMPACTED THE WORLD
- REVISE: DISCUSS FINDINGS IN SMALL GROUPS.
- APPLY: STRATEGY TO PREVENT MISUSE OF NUCLEAR ENERGY

- STRATEGY TO REDUCE MISUSE OF NUCLEAR ENERGY

INQUIRY:

SUSTAINABLE DEVELOPMENT GOALS: CULMINATING TASK/ASSESSMENT:

- STUDENTS WILL CREATE A GOOGLE EARTH PROJECT ON VARIOUS INTERNATIONAL CONVENTIONS ON

- LESSON PLAN



NUCLEAR WEAPONS .

ENGAGE 20 MINUTES) 1. SHARE GOOGLE EARTH PROJECT ON TIMELINE ON DIFFERENT STRUCTURES OF ATOM •

<https://earth.google.com/earth/rpc/cc/drive?state=%7B%22ids%22%3A%5B%221qR5hY9M8a9HTEj6uSpwxREc40bs0e6VG%22%5D%2C%22action%22%3A%22open%22%2C%22userId%22%3A%22102873791154825070792%22%7D&usp=sharing>

EXPLORE (20 MIN) 1.PROMPT STUDENTS TO COMPLETE THE SEE, THINK, WONDER ON HOW AND WHY

THE STRUCTURE OF ATOM EVOLVE WITH TIME ?

2 WHAT IS THE LATEST THEORY OF STRUCTURE OF ATOM?

EXPLAIN (30 MIN) 1. HOW AND WHY THE STRUCTURE OF ATOM EVOLVED WITH TIME?

2. HOW STABILITY OF ATOM CAN BE EXPLAINED BY NUCLEAR ENERGY ?

3. WHAT ARE THE VARIOUS USES OF NUCLEAR ENERGY IN DAY TO DAY LIFE?

4. WHY NUCLEAR ENERGY IS A CLEAN FUEL?

5. MAJOR NUCLEAR TREATIES USING THE GOOGLE PROJECT

[MAJOR NUCLEAR TREATIES OF THE WORLD](#)

1. STUDENTS WORK IN SMALL GROUPS OR PARTNERS TO RESEARCH ON WHY NUCLEAR ENERGY CONVENTIONS BECAME IMPORTANT ? CREATE A GOOGLE PROJECT ON NUCLEAR WEAPON CONVENTIONS IN THE WORLD

2. STRATEGIES TO PREVENT MISUSE OF NUCLEAR ENERGY

REVISE (10 MIN) IN THEIR SMALL GROUPS, ASK STUDENTS TO DISCUSS THE FOLLOWING QUESTIONS: •

1. POSTULATES OF VARIOUS THEORIES OF STRUCTURE OF ATOM AND THEIR DRAWBACKS

3. BEST STRATEGY TO REDUCE MISUSE OF NUCLEAR ENERGY

EVALUATE: CULMINATING TASK RUBRIC

	Exceeding	Meeting	Approaching	Beginning
KNOWLEDGE CONTENT	MASTERY OF KEY CONCEPTS SUCH AS VARIOUS THEORIES OF STRUCTURE OF ATOMS AND THEIR DRAWBACKS, SOURCE OF NUCLEAR ENERGY, USES OF NUCLEAR ENERGY	DEMONSTRATES ADEQUATE UNDERSTANDING OF KEY CONCEPTS SUCH AS VARIOUS THEORIES OF STRUCTURE OF ATOMS AND THEIR DRAWBACKS, SOURCE OF NUCLEAR ENERGY, USES OF NUCLEAR ENERGY	STUDENT DEMONSTRATES PARTIAL UNDERSTANDING OF KEY CONCEPTS SUCH AS VARIOUS THEORIES OF STRUCTURE OF ATOMS AND THEIR DRAWBACKS, SOURCE OF NUCLEAR ENERGY, USES OF NUCLEAR ENERGY	STUDENT LACKS UNDERSTANDING OF KEY CONCEPTS SUCH AS VARIOUS THEORIES OF STRUCTURE OF ATOMS AND THEIR DRAWBACKS, SOURCE OF NUCLEAR ENERGY, USES OF NUCLEAR ENERGY
CLAIM AND EVIDENCE STUDENT DEMONSTRATES	STUDENT PROVIDES A CLEARLY STATED CLAIM NAMING MANY IMPORTANT STUDENT	STUDENT PROVIDES A CLEARLY STATED CLAIM NAMING ONE IMPORTANT	STUDENT PROVIDES A CLEARLY NAMING ONE IMPORTANT NUCLEAR	STUDENT PROVIDES A CLEARLY NAMING ONE IMPORTANT NUCLEAR
NUCLEAR CONVENTION .IDENTIFYING THE MOST IMPORTANT TREATY FOR REDUCING NUCLEAR WAR THREAT BY SEVERAL PIECES OF SPECIFIC EVIDENCE. STUDENT IS ABLE TO EXPLAIN HOW EACH PIECE OF EVIDENCE SUPPORTS THEIR CLAIM AND	STRENGTHENS THEIR ARGUMENT PRESENTATION PRESENTATION CLEARLY AND CREATIVELY COMMUNICATES THE GOALS, STRATEGY AND SUCCESSES OF ONE TREATY TO PREVENT MISUSE OF NUCLEAR ENERGY WHY THIS IS THE BEST	TREATY AND THE OTHER ' STRATEGIES FALL SHORT. ACTION STEPS ENCOURAGING OTHERS TO GET INVOLVED ARE INCLUDED. NUCLEAR CONVENTION .IDENTIFYING THE MOST IMPORTANT TREATY FOR REDUCING NUCLEAR WAR THREAT BY 1-2 PIECES	OF SPECIFIC EVIDENCE. STUDENT IS ABLE TO EXPLAIN HOW EACH PIECE OF EVIDENCE SUPPORTS THEIR CLAIM AND STRENGTHENS THEIR ARGUMENT PRESENTATION CLEARLY AND CREATIVELY COMMUNICATES THE GOALS, STRATEGY AND SUCCESSES OF ONE	

TREATY TO PREVENT MISUSE OF NUCLEAR ENERGY WHY THIS IS THE BEST TREATY AND THE WAYS THAT OTHER ' STRATEGIES FALL SHORT CONVENTION .IDENTIFYING THE MOST IMPORTANT TREATY FOR REDUCING NUCLEAR WAR THREAT BY 1-2 PIECES OF SPECIFIC EVIDENCE.	SUPPORTS THEIR CLAIM AND STRENGTHENS THEIR ARGUMENT PRESENTATIO N CLEARLY AND CREATIVELY COMMUNICAT ES THE GOALS, STRATEGY AND SUCCESSES OF ONE TREATY TO PREVENT MISUSE OF NUCLEAR ENERGY BUT DOES NOT GIVE REASONS WHY THIS IS BEST TREATY CONVENTION .IDENTIFYING THE	MOST IMPORTANT TREATY FOR REDUCING NUCLEAR WAR.EVIDENC E IS EITHER ABSENT OR DOES NOT SUPPORT THE STUDENT'S CLAIM.	AND SUCCESSES OF ONE ORGANIZATIO N AND DOES NOT INCLUDE REASONS WHY THIS IS THE BEST TREATY AND THE WAYS THAT OTHER ' STRATEGIES FALL SHORT. ACTION STEPS DO NOT ENCOURAGE OTHERS TO GET INVOLVED ARE INCLUDED.
STUDENT IS NOT ABLE TO EXPLAIN HOW EACH PIECE OF EVIDENCE	ADDITIONAL RESOURCES	INFORMATION ABOUT THE GOALS, STRATEGY	

THEORIES OF VARIOUS STRUCTURES OF ATOMS

[history of structure of atom](#)

<https://www.compoundchem.com/2016/10/13/atomicmodels/> NUCLEAR TREATIES

AND THEIR IMPORTANCE

<https://www.nti.org/learn/treaties-and-regimes/treaties>

CREDITS

WRITTEN BY POOJA SETH (PGT CHEMISTRY - BBPSGRHM)