# **Chemistry Lesson Plan**

| Topic                                 | Structure and Properties of Matter   |
|---------------------------------------|--|
| Lesson Title                          | Models of the Atom   |
| Lesson Number                         | 3b   |
| Next Generation Science<br>Standards: | HS-PS1-1. Use the periodic table as a model to predict the relative properties of elements based on the patterns of electrons in the outermost energy level of atoms.  |
| Learning objectives:                  | <ul> <li>Describe the Rutherford, Bohr and Schrödinger model of the atom, linking it to the scientist which made the discovery.</li> <li>Identify the shortcomings of each atomic model and how the subsequent model further developed our understanding.</li> </ul> |
| "I can" statement:                    | <ul> <li>I can outline the different models of the atom, their<br/>shortcomings and how each model contributed to today's<br/>atomic model.</li> </ul>   |

### **Prior Knowledge:**

Basic structure of the atom

## Vocabulary:

isotope, neutron, proton, electron, plum pudding model, alpha particle, planetary quantum model, electron cloud model, energy level, photon, quarks, nuclear model

## **Summary of Activities:**

- 1. Distribute and complete bell ringer activity.
- 2. Discuss guided notes and slideshow, with students (continuation from previous lesson).
- 3. Doodle notes
- 4. Exit quiz

### **Additional Resources:**

- Models of the atom YouTube clip
- Rutherford's model of the atom YouTube clip
- Bohr model of the atom

### Homework:

Homework task

## Assessment:

- Bell work
- Assignment/Lab project
- Exit quiz
- End of unit review



