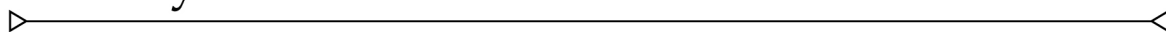


# History of the Atom Worksheet Review Sheet



Answer the following questions.

1. What are the similarities between Thomson's and Rutherford's atomic models?
2. What occurs when two particles possessing the same charges are brought together?
3. What occurs when two particles possessing opposite charges are brought together?
4. As per Bohr's theorem, where are electrons located in an atom?
5. Name the similarities between Dalton's and modern-day atomic models.
6. Name the differences between Dalton's and modern-day atomic models.

# History of the Atom Worksheet Review Sheet

## Answers

1. What are the similarities between Thomson's and Rutherford's atomic models?

The key similarity between the atomic models proposed by Thomson and Rutherford was the presence of both positively and negatively charged regions in an atom.

2. What occurs when two particles possessing the same charges are brought together?

They repel each other.

3. What occurs when two particles possessing opposite charges are brought together?

They attract each other.

4. As per Bohr's theorem, where are electrons located in an atom?

Quantified orbits or specific energy levels

5. Name the similarities between Dalton's and modern-day atomic models.

Dalton's proposed atomic model and the modern-day atomic model have a few broad similarities.

- Both these models proposed that the atom is the smallest particle capable of participating in a chemical reaction.
- In any given compound, the ratio of atoms remains fixed.
- Atoms are spherical.

6. Name the differences between Dalton's and modern-day atomic models.

Some notable differences between the two atomic models include the following:

- Dalton believed that the atom was indivisible, while the modern atomic model theorizes that it can be further divided into subatomic particles like protons, electrons, neutrons, etc.
- Dalton hypothesized that atoms differ in mass and size, while the modern-day atomic model theorizes they differ by average mass.