

# Dalton's Theory Overview



## Fill in the Blank Questions on Dalton's Atomic Theory

1. Dalton proposed that all matter is composed of extremely small particles called \_\_\_\_\_.
2. According to Dalton, atoms are \_\_\_\_\_ and \_\_\_\_\_, meaning they cannot be divided or destroyed.
3. Dalton's theory stated that all atoms of a given element are \_\_\_\_\_ in mass and properties.
4. In Dalton's atomic theory, chemical reactions involve the \_\_\_\_\_ of atoms.
5. Dalton asserted that atoms of different elements combine in \_\_\_\_\_ ratios to form compounds.
6. A major limitation of Dalton's theory is that it could not explain the existence of \_\_\_\_\_, which are atoms of the same element with different masses.
7. The discovery of \_\_\_\_\_ particles, such as electrons, protons, and neutrons, showed that atoms are not indivisible.
8. Dalton's theory did not account for the nature of \_\_\_\_\_ bonds that hold atoms together in compounds.
9. The concept that atoms can be split in nuclear reactions disproves Dalton's postulate of atomic \_\_\_\_\_.
10. Dalton's theory could not explain the phenomenon of \_\_\_\_\_, which involves different forms of the same element, such as oxygen and ozone.

## Key

1. **atoms**
2. **indivisible, indestructible**
3. **identical**
4. **rearrangement**
5. **simple whole-number**
6. **isotopes**
7. **subatomic**
8. **chemical**
9. **indivisibility**
10. **allotropy**