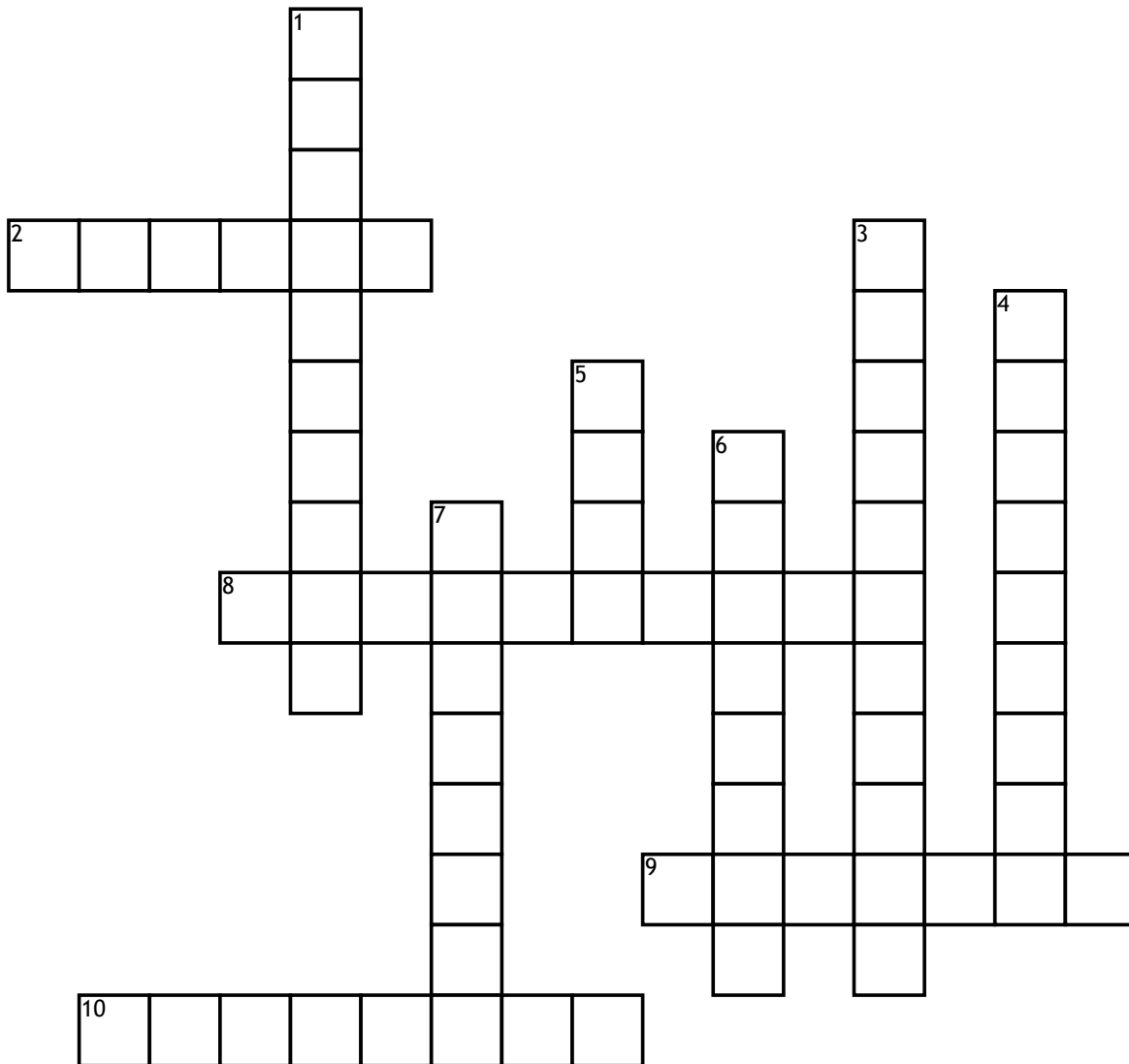


Atomic Theorists



Across

2. Elements consist of atoms and compounds are a collection of atoms
8. Alpha particles, positive charge with a mass 7500x of electron. Proved the plum pudding model was wrong. Nucleus center (+) and tiny electrons moved in space around it
9. Helped to arrange atoms in the periodic table. Atoms were arranged in increasing atomic number using wavelengths and x-rays
10. Oil drop experiment: discovered that atoms had positive and negative charges and that they equal each other

Down

1. Matter is composed of empty space in which atoms move
3. Wave Mechanical Model or Quantum Mechanical Model. Furthered De Broglie's idea of waves by stating that electrons are in clouds but in certain energy region
4. electrons move in waves rather than straight circular paths
5. Electrons are in circular paths depending on their energy levels
6. "Plum pudding model": Atoms contain negative particles called electrons
7. Discovered neutrons (slightly more massive than a proton)