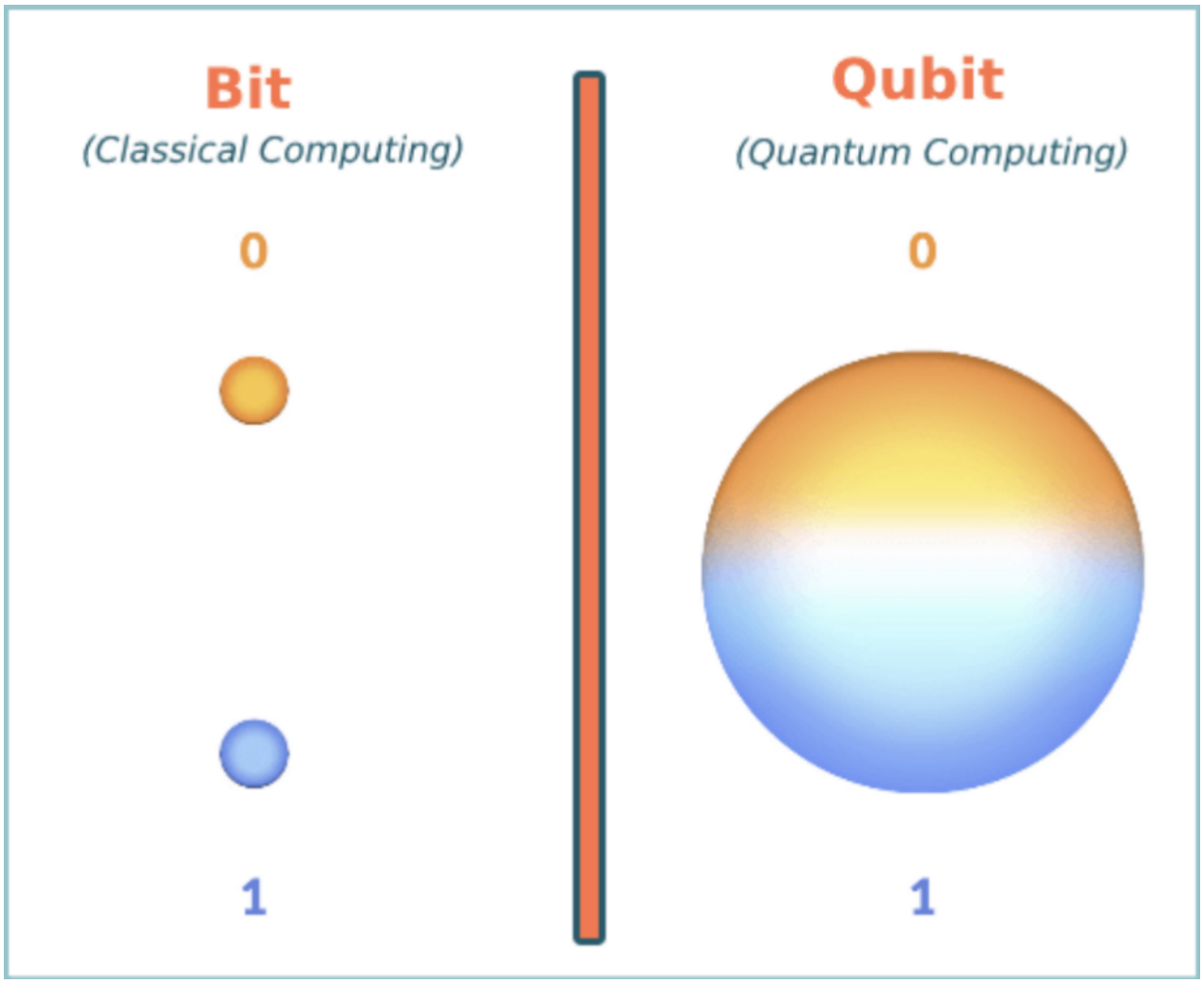
Superposition

Superposition is when a quantum bit (also known as qubit) has an equal chance of being 0 or 1. It is not both 0 and 1 like mainstream describes it which is a misconception. Quantum bits are different from classical bits because classical bits have a 100% chance of being either 0 or 1. Quantum bits can be 0 50% of the time and 1 50% of the time. We add the chances of both, the 0 state and 1 state, to get 100% chance. This is also known as superposing which is where the usage of the word superposition came from.



(Source: https://medium.com/@mark.rethana/a-beginners-guide-to-the-quantum-computing-and-superposition-536e4fc040a2)

We know we can superpose 0 and 1 because of interference which was mentioned previously. Quantum bits follow the rules of quantum physics instead of classical physics. Quantum Computers use and operate on these quantum bits. There is also another experiment that lets us use superposition. This experiment is called the Schrodinger's Cat experiment.