

Day 5: Terminology

Assorted Terms...

Angular Momentum

The momentum associated with rotational motion (as opposed to linear motion (in a straight line)).

Thermal Energy

Objects are made up of billions of atoms and molecules that are moving, rotating, and vibrating back and forth. This motion gives rise to the thermal energy of the object. The faster the atoms are moving, the more thermal energy the object has, and the higher the temperature.

Kelvin

A temperature scale (0 Kelvin = 273 Celsius). The Kelvin scale measures the amount of thermal energy of an object. If all of the atoms and molecules that compose an object are completely stationary, the object has no thermal energy, and its temperature is zero Kelvin. This is the absolute lowest temperature than an object can have (absolute zero).

Degeneracy

Many different elements sharing the same property. In QM, this is often used to refer to *degenerate* energy states, which are two or more distinct quantum states that have the *same energy*.

Spectroscopy

Involves measuring the interaction between light and matter.

New Terms

Intrinsic Spin

Bosons:

Fermions:

Pauli Exclusion Principle

Degeneracy Pressure

Bose-Einstein condensation

Entanglement

Additional Notes: