Temperature and the Zeroth Law of Thermodynamics

Let us take two objects with different temperatures as measured by a thermometer.

What happens when the objects are placed in contact?

Initially

After Some Time

Zeroth Law of Thermodynamics

Every object has a property called "Temperature" which is same for two bodies in "thermal equilibrium"

While the Zeroth Law of Thermodynamics may seem like an obvious and almost silly statement, it is in fact a very deep idea and can actually be considered to form the scientific definition of Temperature. We now will work to connect it to our previous energy concepts and our knowledge about the atomic nature of the microscopic world.