# CONDUCTION

Name		
name		

#### **Advanced Heat Conduction:**

#### Heat Conduction: molecular level:

Heat *conducts* when two thing are touching because the molecules will collide into each other.

### **Temperature**

All things are made from molecules that are moving.

The average molecular kinetic energy of the molecuels is represented in the temperature

## Thermal equilibrium

Heat always flows from high temperature to low temperature, until everything has the same temperature.

When everything reaches the same temperature, it is called thermal equilibrium.

Imagine two things are *touching each other*. Imagine that thing #2 has a much higher temperature than thing #1

Both of these things are made from molecules, and the molecules are always moving!

**30.** Draw the molecules moving in thing #1 and thing #2

Thing #1	Thing #2

- **31.** Where are the molecules moving faster?
- **32.** What is the word for the average kinetic energy of molecules?
- **33.** What do we call it when the *average kinetic energy of molecules* in two things is equal?

When a molecule from Thing #2 hits a molecule from thing #1, the thing #2 molecule moves a little slower, and the thin #1 molecule moves a little faster.

- **34.** When this happens, how does the *average kinetic energy of molecules* change?
- **35.** When will the average kinetic energy of the molecules stop changing?