

Thermal Energy

Thermal Expansion: When matter gets more energy the particles in it start moving faster, this makes the material expand (increase in volume)

Thermal Contraction: When matter loses energy the particles in it move slower, this makes the material contract (decrease in volume)

Do not write down

What happens if you heat up a glass and then place it in ice water?

Thermal energy: The total amount of kinetic energy of all the particles in a substance.

Heat: Energy moving from one substance to another.

Temperature: The average thermal energy of a substance.

Do not write down

Which has more thermal energy, a 10 kilogram piece of iron heated to 100 degrees Celsius or a 5 kilogram piece of iron heated to 100 degrees?

Does one have a higher temperature? If so which?

If you pick up the heated piece of iron with your bare hand what will happen? How will heat flow?