



HEATING GETS THEM MOVING



LYRICS AND CHORDS

Verse 1:

Cm

Why is lead so heavy, why does ice melt when its warm?

G7

Why do liquids flow and take on their containers form?

Cm

The reason substances behave in the way they do,

G7

Cm

They're made from particles that bond and move

Chorus:

Atoms, ions, molecules, make up all substances and,
Heating them makes these particles break bonds and move at greater speed,
The way they bond or move gives substances their properties,
Solid, liquid, gas, that's the particle theory.

Cm

G7

Heating gets them moving. x 2

Verse 2:

Particles in solids are as close as they can be,
That's why compressing them cannot be done so easily,
It's also why they tend to have the greatest density,
More kilograms of mass per metre cubed.

Fm

Stuck together tightly, their particles vibrate,

G7

Those bonds are why a solid keeps its shape.

Verse 3:

When you're heating up a substance, you raise its temperature,
By doing work on particles to make them vibrate more,
They push themselves apart a little further than before,
But the bonds will hold the particles in place.
Strong bonds make it harder to vibrate them rapidly,
So a substance with strong bonds has higher heat capacity.

Chorus

Verse 4:

Eventually the temperature will no longer increase,
Particles won't vibrate any faster 'til some bonds release,
The energy that breaks the bonds is known as latent heat,
Then the solid can begin to melt.
Particles in liquids stay close but bonds can split,
So a liquid flows but might only compress a tiny bit.

Chorus

Verse 5:

Cm

G7

Keep providing energy and all the bonds will break,
Boiling liquids bubble as their particles separate to gas,
Whizzing around at random speeds in random ways,
Hotter gases particles have higher average rates,
Spreading out as much as possible to fill up any space,
Colliding with the sides of vessels they accommodate,
More collisions every second, the pressure escalates,
And rises with the temperature as the particles accelerate.

Chorus

