

Energy! By Jonny Berliner

G5

Energy what is it?

If something's gonna cause an object to move,
Whether tiny as a photon or as big as the moon,
We can calculate how much movement that could be,
And that number is a thing that we call energy.

And it's measured in Joules. I don't mean like precious jewels, I mean like James Joule

G5

It can be stored in stretched elastic or the movement of a ball,
The repulsion of two magnets or the bonds in chemicals,
Between the apple and the earth, if an apple wants to fall,
The nuclei of atoms, mass of anything at all.

C

But whenever there's a change we shifted energy,

G5

By pushing, heating, lighting or electricity,

C

It will go to a new store, that's what we always observe,

D

'Cos there's a fundamental law that says that energy's conserved.

Chorus

G5

It can't be made or destroyed.
There's many ways it is stored.
Change means it's shifted to new stores.
And the energy after is the same as before.

So let's think about the energy of gases in a tin,
The particles are moving fast and bouncing within,
The faster that they move, the hotter that they are,
And a measure of their average speed is temperature.
And since particles attract that will store energy too,
And means that it will take more work to make the particles move,
So every substance has its own specific heat capacity,
And different latent heat to change the state it can be.

Chorus

So what's power? Power is how fast you can move the energy, how many Joules every second, or Watts. So if somebody asks you 'what's the unit of power?' you say 'yes it is!'

A

But in the real world, we find that energy escapes,
Like when your coffee gets cold, that's why we insulate,
And air resistance and friction make cars decelerate,

Bb

C D

So, they are aerodynamic and then we lubricate.

Chorus