

EM Waves by Jonny Berliner

G C D G C/G G

If you make charged particles shake they make waves electromagnetically,

G C D G C/G G

That will radiate as a transverse way through a vacuum infinitely,

Am D Am D

There's nothing faster it's reckoned, going 300 million metres every second,

Am D C D

Spreading out in every direction, they're all around us continually.

Their wavelengths form a spectrum with a range of frequencies,

The waves are all invisible except the visible light we see,

Some substances transmit them, others reflect them, if they happen absorb them we use that to detect them,

Now we know they've a whole collection of uses and properties.

G C A D

Radiowaves, their frequency's low, microwaves for my mobile phone,

B Em Am D

Infrared feels like heat to me, visible light is what I see!

G C Am D

Ultraviolet tans my skin, X-rays show me my bones within,

Bm Em Am D G

Gamma Rays may make me scared, electromagnetic waves are everywhere.

Radio waves move electrons in antennae on radios,

We can also use the signals made to send wifi to and fro,

Microwaves beamed to satellites send mobile phonecalls day and night,

And TV signals and they're mighty good at heating up your food.

Infrared cooks your toast and makes you warm when you stand in the sun,

It's in remote controls and police use it the dsrk to catch s thief on the run,

Visible light as a laser might read your CD's, or fix your eyes,

And fibre optics are carrying light to get broadband down your street,

Chorus

Em A

UV, X and Gamma rays have such high energy,

Em A

Living cells exposed too long have unwanted chemistry,

C D G E

They can make cells cancerous or kill them completely,

Am D

But gamma rays kill cancer too and sterilise scalpels for surgery,

Chorus x 2