

## **The States of Matter**

(A parody sung to the tune of "Battle Hymn of the Republic")

### **Verse 1**

The states of matter come from atoms energy they store  
And it's constantly exerted as they vibrate back and forth  
As the energy accumulates, the atoms vibrate more  
Phase changes can occur!

### **Chorus**

Solid, Liquid, Gas and Plasma  
Solid, Liquid, Gas and Plasma  
Solid, Liquid, Gas and Plasma  
And now Bose-Einstein!

### **Verse 2**

Solids have less energy with atoms locked in place  
Liquid atoms move around and take up different shapes  
Gaseous atoms move apart and fill up any space  
And Plasma photons glow!

### **Chorus**

Solid, Liquid, Gas and Plasma  
Solid, Liquid, Gas and Plasma  
Solid, Liquid, Gas and Plasma  
And now Bose-Einstein!

### **Verse 3**

Now Einstein hypothesized another state exists  
And more recently a scientist has found what he had missed  
A state at real cold temperatures that aren't in our midst  
Bose found it could subsist!

### **Chorus**

Solid, Liquid, Gas and Plasma  
Solid, Liquid, Gas and Plasma  
Solid, Liquid, Gas and Plasma  
And now Bose-Einstein!  
And now Bose-Einstein!  
And now Bose-Einstein!



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