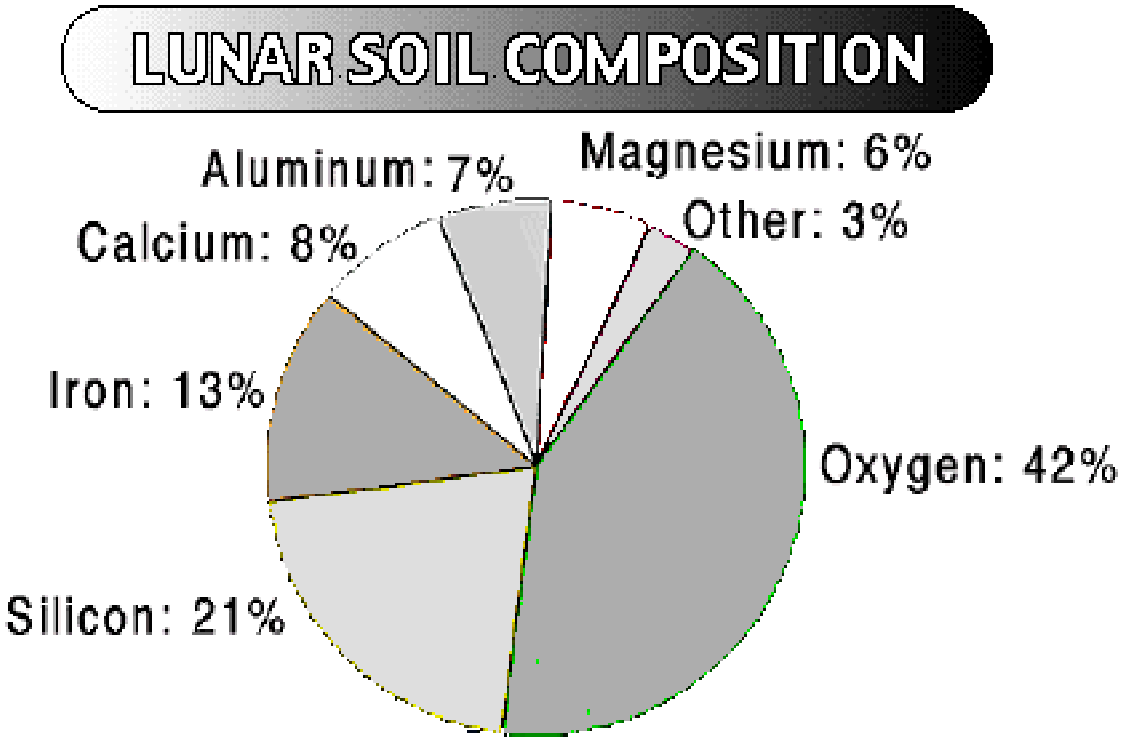

"**Pie in the Sky?**" For many, that's just what the Moon is. But, what **a great Recipe** that pie has! As you can see from the "pie chart" above, the loose lunar soil which requires no disfiguring mining, contains the ingredients for many useful building products: important **metals** and **alloys**; oxides for making **glass**, **fiber glass**, and **glass-glass composites** as strong as steel, **ceramics**, even **cement** and **concrete**.

There is also a considerable volume of valuable volatiles (**hydrogen**, **helium**, **carbon**, **nitrogen**, **neon**, **argon**, etc.) absorbed to the fine soil particles that can be easily harvested by heating them.

Lunar Building Materials be used to expand a first outpost and eventually to build larger **settlements**. But they will also allow us to build **larger, cheaper space stations**, **laboratories**, **factories**, and **tourist facilities in Low Earth Orbit** (LEO), as well as clean **Solar Power Satellites** to fill Earth's energy needs without polluting the atmosphere with greenhouse gasses.

All this is possible because it takes **20 times LESS energy to launch** a given size payload **from the Moon's low-gravity surface** to a destination in Earth orbit as it does to launch such a payload from the surface of Earth itself. Fuel expenditures, not distance are the relevant factor.

The **Lunar Prospector** Orbiter, in 1998-9, discovered large deposits of comet-impact-derived **water ice** in permanently shaded craters in both the north and south polar regions of the Moon: water for **agriculture** and industry; **cryogenic fuels** for rocket transportation on the Moon and between Moon and Earth, Moon and Mars.

The Moon? **It's not just "a Rubble Pile" anymore!**