

Minerals and their gems

Quartz- SiO_2



Rose quartz

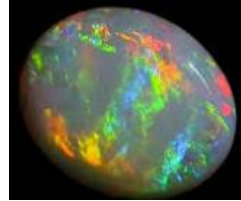


Citrine



Amethyst

Opal – hydrated (contains water) amorphous form of silica, the water in the structure causes light to be refracted in a multitude of colors.



Agate

Beryl - (Emerald, Aquamarine, Heliodor, Morganite) $\text{Be}_3\text{Al}_2(\text{SiO}_3)_6$



Emerald on matrix



Aquamarine



Golden Beryl-Heliodor



Morganite

Corundum - (Ruby, Sapphire) Al_2O_3



Ruby



Sapphire



Garnet - Almandine



Olivine – Peridot $(\text{Mg, Fe})_2\text{SiO}_4$



Topaz - $\text{Al}_2\text{SiO}_4(\text{F,OH})_2$

