

Appendix Table 3. Some minerals found in meteorites (Mason, 1979; and Kerridge and Mathews, 1988).

Silicates, phosphate and oxides	
Akermanite (Ak) $\text{Ca}_2\text{MgSi}_2\text{O}_7$	Melilite solid solution: Ak-Geh
Albite (Ab) $\text{NaAlSi}_3\text{O}_8$	Mica $\text{X}_2\text{Y}_{4-6}\text{Z}_8\text{O}_{20}(\text{OH},\text{F})_4$
Andradite $\text{Ca}_3\text{Fe}_2\text{Si}_3\text{O}_{12}$	X = K,Na,Ca; Y = Al,Mg,Fe; Z = Si,Al,Fe,Ti
Anorthite (An) $\text{CaAl}_2\text{Si}_2\text{O}_8$	Merrillite $(\text{K},\text{Na})_2\text{Fe}_5\text{Si}_{12}\text{O}_{30}$
Apatite $\text{Ca}_3(\text{PO}_4)_2$	Monticellite $\text{Ca}(\text{Mg},\text{Fe})\text{SiO}_4$
Armalcolite $\text{FeMgTi}_2\text{O}_5$	Montmorillonite
Augite $\text{Mg}(\text{Fe},\text{Ca})\text{Si}_2\text{O}_6$	$(\text{Ca}_{0.5},\text{Na})_{0.7}\text{Al}_4[(\text{Si},\text{Al})_8\text{O}_{20}](\text{OH})_4 \cdot n\text{H}_2\text{O}$
Baddeleyite ZrO_2	Na-phlogopite $\text{NaMg}_3\text{AlSi}_3\text{O}_{10}(\text{OH})_2$
Bloedite $\text{Na}_2\text{Mg}(\text{SO}_4)_2 \cdot 4\text{H}_2\text{O}$	Nepheline NaAlSiO_4
Brianite $\text{CaNa}_2\text{Mg}(\text{PO}_4)_2$	Olivine solid solution: Fo-Fa
Buchwaldite NaCaPO_4	Orthoclase (Or) KAlSi_3O_8
Calcite CaCO_3	Orthopyroxene $(\text{Mg},\text{Fe})\text{SiO}_3$
Clinopyroxene $(\text{Ca},\text{Mg},\text{Fe})\text{SiO}_3$	Panethite $(\text{Ca},\text{Na})_2(\text{Mg},\text{Fe})_2(\text{PO}_4)_2$
Chlorapatite $\text{Ca}_5(\text{PO}_4)_3\text{Cl}$	Perovskite CaTiO_3
Chlorite $(\text{Mg},\text{Fe})_6\text{Si}_4\text{O}_{10}(\text{OH})_8$	Phyllosilicates: hydrous silicates
Chromite FeCr_2O_4	Pigeonite $(\text{Fe},\text{Mg},\text{Ca})\text{SiO}_3$
Cordierite $\text{Mg}_2\text{Al}_4\text{Si}_5\text{O}_{18}$	Plagioclase solid solution: Ab-An
Corundum Al_2O_3	Potash feldspar $(\text{K},\text{Na})\text{AlSi}_3\text{O}_8$
Cristobalite SiO_2	Pyroxene solid solution: En-Fs-Wo
Diopside $\text{CaMgSi}_2\text{O}_6$	Quartz SiO_2
Dolomite $\text{CaMg}(\text{CO}_3)_2$	Rhoenite $\text{Ca}_4(\text{Mg},\text{Al},\text{Ti})_{12}(\text{Si},\text{Al})_{12}\text{O}_{40}$
Enstatite (En) MgSiO_3	Richterite $\text{Na}_2\text{CaMg}_5\text{Si}_8\text{O}_{22}\text{F}_2$
Epsomite $\text{MgSO}_4 \cdot 7\text{H}_2\text{O}$	Ringwoodite $(\text{Mg},\text{Fe})_2\text{SiO}_4$
Farringtonite $\text{Mg}_3(\text{PO}_4)_2$	Roedderite $(\text{K},\text{Na})_2\text{Mg}_5\text{Si}_{12}\text{O}_{30}$
Fassaite $\text{Ca}(\text{Mg},\text{Ti},\text{Al})(\text{Al},\text{Si})_2\text{O}_6$	Sanidine KAlSi_3O_8
Fayalite (Fa) Fe_2SiO_4	Sarcopside $(\text{Fe},\text{Mn})_3(\text{PO}_4)_2$
Feldspar solid solution: Or-Ab-An	Scheelite CaWO_4
Ferrosilite (Fs) FeSiO_3	Septechlorite $(\text{Fe},\text{Mg})_6(\text{Si},\text{Al},\text{Fe})_4\text{O}_{10}(\text{OH})_8$
Forsterite (Fo) Mg_2SiO_4	Serpentine $(\text{Mg},\text{Fe})_6\text{Si}_4\text{O}_{10}(\text{OH})_8$
Gehlenite (Geh) $\text{Ca}_2\text{Al}_2\text{SiO}_7$	Sodalite $\text{Na}_4\text{Al}_3\text{Si}_3\text{O}_{12}\text{Cl}$
Graftonite $(\text{Fe},\text{Mn})_3(\text{PO}_4)_2$	Spinel (Sp) MgAl_2O_4
Grossular $\text{Ca}_3\text{Al}_2\text{Si}_3\text{O}_{12}$	Spinel solid solution: Sp-Her
Gypsum $\text{CaSO}_4 \cdot 2\text{H}_2\text{O}$	Stanfieldite $\text{Ca}_4(\text{Mg},\text{Fe})_5(\text{PO}_4)$
Hedenbergite $\text{CaFeSi}_2\text{O}_6$	Thorianite ThO_2
Hematite Fe_2O_3	Tridymite SiO_2
Hercynite (Her) $(\text{Fe},\text{Mg})\text{Al}_2\text{O}_4$	Ureyite $\text{NaCrSi}_2\text{O}_6$
Hibonite $\text{CaAl}_{12}\text{O}_{19}$	V-rich magnetite $(\text{Fe},\text{Mg})(\text{Al},\text{V})_2\text{O}_4$
Ilmenite FeTiO_3	Wollastonite (Wo) CaSiO_3
Magnesiocromite MgCrO_4	Yagiite $(\text{K},\text{Na})_2(\text{Mg},\text{Al})_5(\text{Si},\text{Al})_{12}\text{O}_{30}$
Magnetite Fe_3O_4	Zircon ZrSiO_4
Majorite $\text{Mg}_3(\text{Mg},\text{Si})\text{Si}_3\text{O}_{12}$	

Sulfides, nitrides and others,

Alabandite (Mn,Fe)S,	Mackinawite FeS_{1-x}
Awaruite Ni_3Fe	Marcasite FeS_2
Barringerite (Fe,Ni) $_2\text{P}$	Molybdenite MoS_2
Brezinaite Cr_3S_4	Ninningerite (Mg,Fe)S
Carlsbergite CrN	Oldhamite CaS
Caswellsilverite NaCrS_2	Osbornite TiN
Chalcopyrite CuFeS_2	Pentlandite (Fe,Ni) $_9\text{S}_8$
Cohenite (Fe,Ni) $_3\text{C}$	Perryite (Ni,Fe) $_5(\text{Si,P})_2$
Cubanite CuFe_2S_3	Pyrite FeS_2
Daubreelite FeCr_2S_4	Pyrrhotite Fe_{1-x}S
Diamond C	Roaldite (Fe,Ni) $_4\text{N}$
Djerfisherite $\text{K}_3\text{CuFe}_{12}\text{S}_{14}$	Schreibersite (Fe,Ni) $_3\text{P}$
Graphite C	Sinoite $\text{Si}_2\text{N}_2\text{O}$
Greigite Fe_3S_4	Smythite Fe_9S_{11}
Haxonite Fe_{23}C_6	Sphalerite (Zn,Fe)S
Heazlewoodite Ni_3S_2	Suessite Fe_3Si
Heideite (Fe,Cr) $_{1+x}(\text{Ti,Fe})_2\text{S}_4$	Taenite (Fe,Ni)
Kamacite (Fe,Ni)	Tetrataenite FeNi
Krinovite $\text{NaMg}_2\text{CrSi}_3\text{O}_{10}$	Troilite FeS
Lawrencite (Fe,Ni) Cl_2	Valleriite CuFeS_2
Lonsdaleite C	
