



### Asteroid Ice-cream Cheat Sheet

<b>Meteorite Component</b>	<b>Description</b>	<b>Ingredient</b>
MATRIX	Fine grained “rocky” background material binds all components together	Ice-cream mix
CHONDRULE	Sphere of silicate melt - formed by rapid melting (to >2000K) and quenching	Toffee chocolate balls
CAIs	“Fluffy” blue-grey rocky pieces, formed of refractory minerals (Ca-Al), formed at very high temperatures close to the Sun	marshmallows
METAL	Free Fe-Ni metal blebs formed in reducing environment	Metal balls
ORGANIC CARBON	Range of organic material found in meteorites including amino acids, purines/pyrimidines, organic alcohols etc. Carbon rich asteroids found in outer asteroid belt.	Chocolate syrup
VOLATILES	Asteroids rich in volatiles: N <sub>2</sub> , CO <sub>2</sub> , NH <sub>3</sub> , ices water etc	Liquid nitrogen