

Star Classes

This table gives the star class, color, mass, and size for **main sequence** stars. Most of the real sizes in the table represent a star in the middle of each class. The G class star shown is our sun, which is brighter and larger than the middle of the G class for main sequence stars.

Instructions:

Complete the following size table for classes of main sequence stars using a 1:10 billion scale. Determine a real life object that could be used to represent that star on our scale.

Class	Color	Mass*	Size	Scale Size	Model Object
O	Blue White	40 x M _{Sun}	1300 billion cm	130 cm	Small round car or giant ball
B	Blue White	6.5 x M _{Sun}	430 billion cm	43 cm	large blue play ball
A	White	2.1 x M _{Sun}	300 billion cm	30 cm	volleyball
F	Yellow White	1.3 x M _{Sun}	180 billion cm	18 cm	cantalope
G	Yellow	M _{Sun}	140 billion cm	14 cm	large grapefruit or yellow ball
K	Orange	0.7 x M _{Sun}	100 billion cm	10 cm	orange
M	Red	0.2 X M _{Sun}	30 billion cm	3 cm	cherry tomato or small red ball

*M_{Sun} is the mass of the Sun.

The mass of the Sun is 2,000,000,000,000,000,000 trillion kilograms!