

Astronomy Ranking Task: Spectral Types

Exercise #3

Description: The table below lists the spectral types and absolute magnitudes for six stars labeled P through U.

Star	M	Spectral Type
P	-4	O7
Q	-2	B0
R	12	B0
S	-4	F3
T	4	F3
U	10	M0

A. Ranking instructions: Rank the temperatures of the stars.

Ranking Order: Hottest 1 _____ 2 _____ 3 _____ 4 _____ 5 _____ 6 _____ Coolest

Or, there is not enough information to determine the temperatures. _____ (indicate with a check mark)

Carefully explain your reasoning for ranking this way:

B. Ranking instructions: Rank the actual energy outputs of the stars.

Ranking Order: Least 1 _____ 2 _____ 3 _____ 4 _____ 5 _____ 6 _____ Most

Or, there is not enough information to determine the energy outputs. _____ (indicate with a check mark)

Carefully explain your reasoning for ranking this way:

C. Ranking instructions: Rank the sizes of the stars.

Ranking Order: Smallest 1 _____ 2 _____ 3 _____ 4 _____ 5 _____ 6 _____ Largest

Or, there is not enough information to determine the sizes. _____ (indicate with a check mark)

Carefully explain your reasoning for ranking this way:
