

Astronomy Ranking Task: Stellar Evolution

Exercise #3

Description: The list below provides various stages of star formation and evolution for low mass stars ($<8 M_{Solar}$) and high mass stars ($>8M_{Solar}$).

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|--|--|
| A Planetary Nebula Star | G O Spectral Class Main Sequence Star |
| B G Spectral Class Main Sequence Star | H Molecular Cloud of Gas and Dust |
| C Neutron Star | I White Dwarf |
| D Supernova Type II | J Black Hole |
| E Nothing | K Supernova Type I |
| F Giant | L Nova |
| | M Gravity Collapse of Gas/Dust Cloud |

A) Ranking Instructions: Rank, from earliest to latest, the stages for a low mass stars without a companion. Do not include any stages that do not apply.

Earliest

Latest

Information is insufficient to rank stages: _____ (indicate with check mark).

Carefully explain your reasoning for ranking this way:

B) Ranking Instructions: Rank, from earliest to latest, the stages for a low mass stars with a companion. Do not include any stages that do not apply.

Earliest

Latest

Information is insufficient to rank stages: _____ (indicate with check mark).

Carefully explain your reasoning for ranking this way:

C) Ranking Instructions: Rank, from earliest to latest, the stages for the least massive of the high mass stars. Do not include any stages that do not apply.

Earliest

Latest

Information is insufficient to rank stages: _____ (indicate with check mark).

Carefully explain your reasoning for ranking this way:

D) Ranking Instructions: Rank, from earliest to latest, the stages for the most massive of the high mass stars. Do not include any stages that do not apply.

Earliest

Latest

Information is insufficient to rank stages: _____ (indicate with check mark).

Carefully explain your reasoning for ranking this way:
