

Astronomy Ranking Task: Star 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 ($>8 M_{Solar}$).

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|--|--|
| A Planetary Nebula | 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.

Ranking Order:

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.

Ranking Order:

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.

Ranking Order:

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.

Ranking Order:

Earliest

Latest

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

Carefully explain your reasoning for ranking this way:
