

NOTE:

This document contains both the pre- and post- test and the pages are labeled accordingly.

The Classification of Stellar Spectra

Pre-test

Name _____ Date _____
Graduation Date _____ Major _____

1. How does an astronomer determine the spectral classification of a star?
2. Here are spectral displays of three stars. Which of the two are the same spectral type?

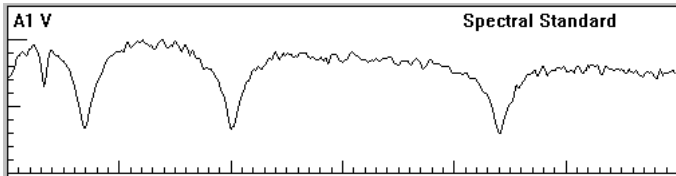


Figure A

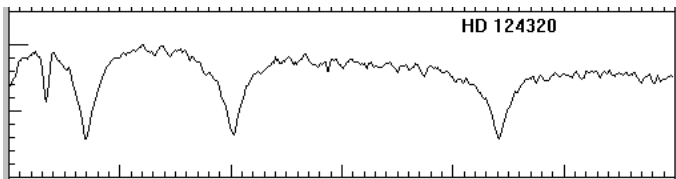


Figure B

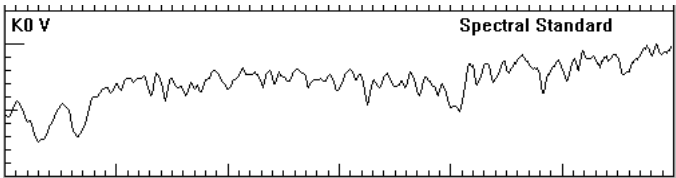
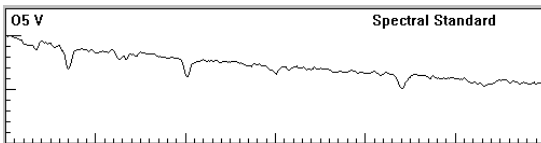
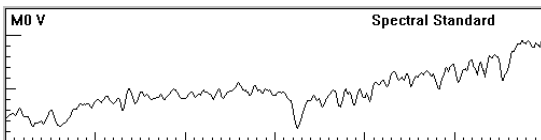


Figure C

3. Using the diagram, determine which one of these two stars has the highest temperature. Circle the correct answer.



Star 1



Star 2

4. When taking spectra, why do astronomers expose longer for faint stars than bright stars?

5. Two stars with the same spectral type, have the same characteristics:

	Yes	No
a. Luminosity	<input type="checkbox"/>	<input type="checkbox"/>
b. Distance	<input type="checkbox"/>	<input type="checkbox"/>
c. Temperature	<input type="checkbox"/>	<input type="checkbox"/>
d. Apparent Magnitude	<input type="checkbox"/>	<input type="checkbox"/>
e. Absolute Magnitude	<input type="checkbox"/>	<input type="checkbox"/>
f. Chemical Composition	<input type="checkbox"/>	<input type="checkbox"/>

6. Other than the spectra, what data does the astronomer need to have to determine the distance of a star?

The Classification of Stellar Spectra

Post-test

Name _____ Date _____
 Graduation Date _____ Major _____

- How does an astronomer determine the spectral classification of a star?
- Here are spectral displays of three stars. Which of the two are the same spectral type?

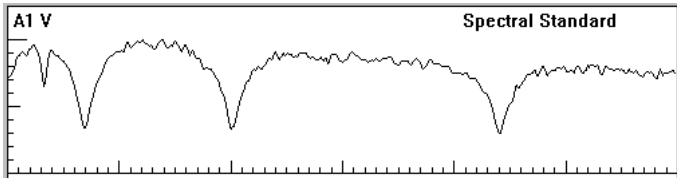


Figure A

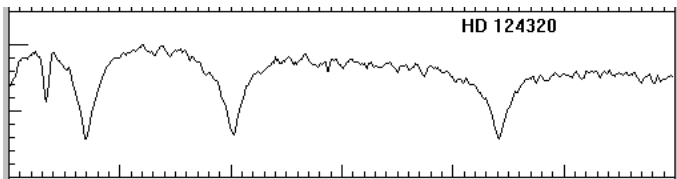


Figure B

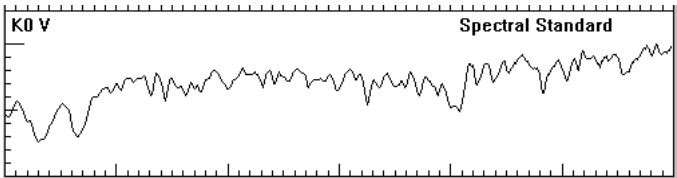
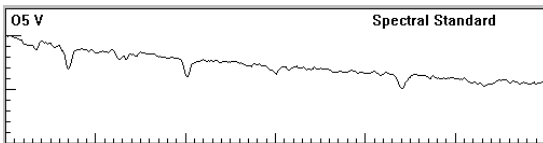
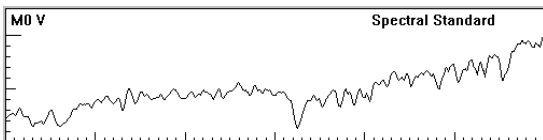


Figure C

- Using the diagram, determine which one of these two stars has the highest temperature. Circle the correct answer.



Star 1



Star 2

4. When taking spectra, why do astronomers expose longer for faint stars than bright stars?

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d. Apparent Magnitude	<input type="checkbox"/>	<input type="checkbox"/>
e. Absolute Magnitude	<input type="checkbox"/>	<input type="checkbox"/>
f. Chemical Composition	<input type="checkbox"/>	<input type="checkbox"/>

6. Other than the spectra, what data does the astronomer need to have to determine the distance of a star?