

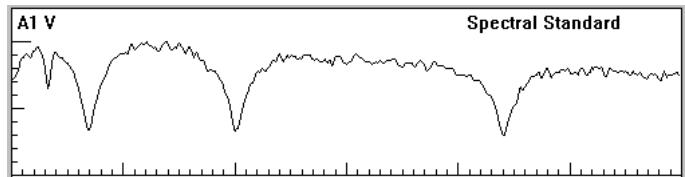
**NOTE:**

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

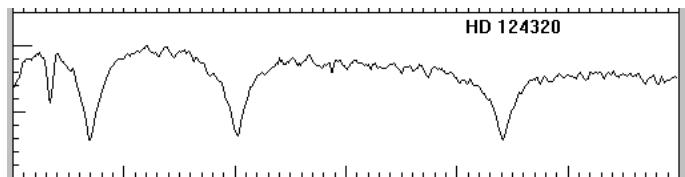
## The Classification of Stellar Spectra Pre-test

Name \_\_\_\_\_ Date \_\_\_\_\_  
Graduation Date \_\_\_\_\_ Major \_\_\_\_\_

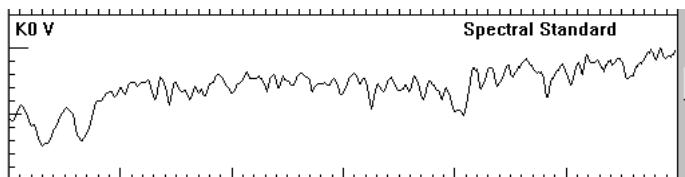
1. How does an astronomer determine the spectral classification of a star?
2. Here are spectral displays of three stars. Which of the two are the same spectral type?



**Figure A**

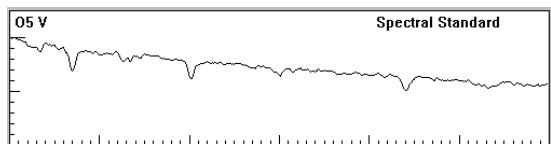


**Figure B**

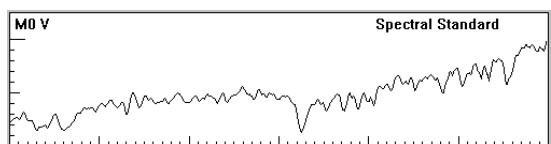


**Figure C**

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:

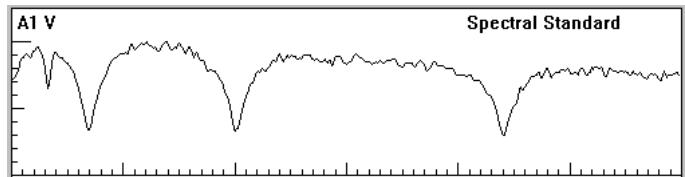
	Yes	No
a. Luminosity	<input type="checkbox"/>	<input type="checkbox"/>
b. Distance	<input type="checkbox"/>	<input type="checkbox"/>
c. Temperature	<input type="checkbox"/>	<input type="checkbox"/>
d. Apparent Magnitude	<input type="checkbox"/>	<input type="checkbox"/>
e. Absolute Magnitude	<input type="checkbox"/>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

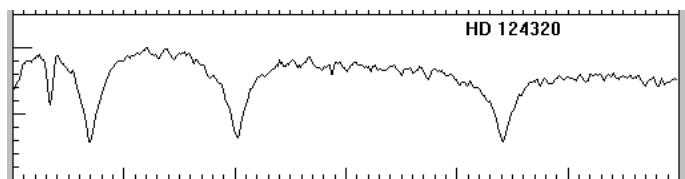
## The Classification of Stellar Spectra Post-test

Name \_\_\_\_\_ Date \_\_\_\_\_  
Graduation Date \_\_\_\_\_ Major \_\_\_\_\_

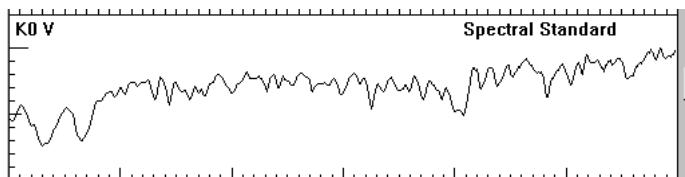
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**Figure A**

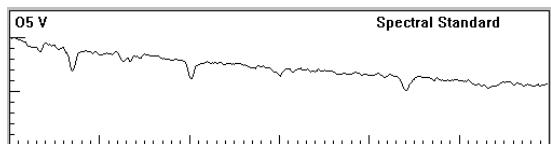


**Figure B**

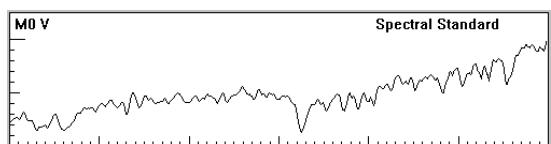


**Figure C**

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?