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Unit 6J
Spectral Composition
Note-Taking Guide

Name:

Date:

Main Ideas, Key Points, Questions:

After watching the video segment, write down key points, main ideas, and big questions.

Objective(s):

- ***Compare and contrast how absorption and emission spectra are created, and understand what the lines on each spectrum represent.***

Notes:

During the video segment, use words, phrases, or drawings to take notes.

Summary:

After watching the video segment, write at least three sentences explaining what you learned. You may ask yourself: "If I was going to explain this to someone else, what would I say?"

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Unit 6J
Spectral Composition
Questions to Consider

Name:

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Answer the following.

1. Define spectral composition in your own words.

2. How is the complexity of an element's spectral composition related to its number of electrons?

3. How does an absorption spectrum compare to an emission spectrum?

4. What tool is used by scientists to view absorption and emission spectra?

5. How do scientists determine the composition of stars that are light years away?

6. How is a star or galaxy moving relative to a telescope if the absorption spectrum is shifted toward the red end of the visible spectrum?

questions continued on next page

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Answer the following.

7. What is the opposite of a red shift? How is a star moving relative to a telescope when this occurs?

8. Define a quantum of energy in your own words.

9. Are energy changes greater between lower energy levels or between higher energy levels?