

## Pre and post Questionnaire

Name \_\_\_\_\_

Date \_\_\_\_\_

1. Write the formula usually referred to as Beer's Law

2. If you were to cut the concentration of a given solution in half, what effect would it have on the UV-VIS spectrum:

	decrease	increase	remain the same	can not be determined
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a. absorbance	_____	_____	_____	_____
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b. path length	_____	_____	_____	_____
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c. magnetic strength	_____	_____	_____	_____
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d. depth of color	_____	_____	_____	_____
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e. transmittance	_____	_____	_____	_____
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3. Suppose you were to make up a second solution with the same concentration as the first, but of a different molecule. What effect would you expect to see on the absorbance at the peak maximum?

	decrease	increase	remain the same	can not be determined
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	_____	_____	_____	_____
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## Pre and post Questionnaire

Name \_\_\_\_\_

Date \_\_\_\_\_

4. If in a UV-VIS experiment, you doubled the path length, then you would expect absorbance to

decrease	increase	remain the same	can not be determined
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5. What causes absorbance of electromagnetic energy in a molecule?

6. What physical phenomenon is associated with:

- |                   |                           |
|-------------------|---------------------------|
| 1. UV light       | a. vibrational transition |
| 2. infrared light | b. rotational transition  |
| 3. microwaves     | c. electronic transition  |
| 4. visible light  | d. electron ejection      |

7. Rate how comfortable you feel on doing calculations involving logarithms:

1 extremely uncomfortable-----5 completely comfortable

1. \_\_\_\_\_ 2. \_\_\_\_\_ 3. \_\_\_\_\_ 4. \_\_\_\_\_ 5. \_\_\_\_\_