

Name:

Date:

Class:

Week 3 Questions

Water Testing and Measurement

1. How many parameters will our water test strips test? _____
2. Name three of the parameters that we will test for.
 - a. _____
 - b. _____
 - c. _____
3. A result that is underlined in red indicates that the sample is _____ the _____
_____.
4. The Red Sea Algae Control Test Kit tests for _____ and _____.
5. For the first test of the Red Sea test kit (PO₄), do the following:
 - a. Begin with _____ mL of sample water.
 - b. Add _____ drops of reagent A.
 - c. Swirl _____ seconds.
 - d. Add _____ drops of reagent B.
 - e. Swirl _____ seconds.
 - f. Wait _____ minutes.

For the second test of the Red Sea test kit (NO₃), do the following:

- A. Begin with _____ mL of sample water.
 - B. Add _____ drops of reagent A.
 - C. Swirl _____ seconds.
 - D. Add _____ level scoop of reagent B.
 - E. Swirl _____ seconds with the lid on.
 - F. Add _____ level scoop of reagent C (with a different spoon).
 - G. Swirl _____ seconds with the lid on.
 - H. Wait _____ minutes.
6. High-range test ... only if necessary.

Begin with _____ mL of sample water with _____ mL of RO water. Then follow Steps B through H from #5 above.
 7. Spectroscopy: The study of _____ radiation emitted or absorbed by a _____ species.
 8. Spectrophotometry is a type of spectroscopy that measures how much _____ is _____ by a chemical substance by measuring the _____ of the light beam that is not absorbed.

Name:

Date:

Class:

9. What we see from color is _____ light, the difference between incident light and absorbed light.

10. Parts of a spectrophotometer:

- a. Light source
- b. Collimator (_____)
- c. Monochromator (_____ or grating)
- d. _____ selector (slit)
- e. Sample solution (in cuvette)
- f. Detector (_____)
- g. Digital display or meter

The relationship between absorbance and transmittance is logarithmic.