

## Test-Taking Style

### **Maximizing Your Mental Game:**

The key to maintaining your engagement is to \_\_\_\_\_.

Four key ways to accomplish this:

- 1.
- 2.
- 3.
- 4.

Take \_\_\_\_\_ as often as needed, but everyone should take at least one (remember, the EOC test is untimed).

Take a few laps through the test:

First lap: \_\_\_\_\_.

Second lap: \_\_\_\_\_.

*Use the \_\_\_\_\_ feature: do not feel like you have to take the test sequentially.*

**And, most importantly, remember our key term: STATISTICAL WINS!**

# Test-Taking Strategies

When Looking at a Graph, read:

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

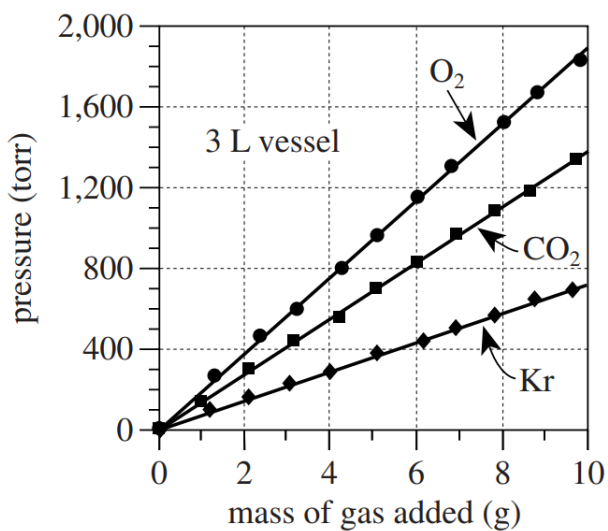


Figure 1

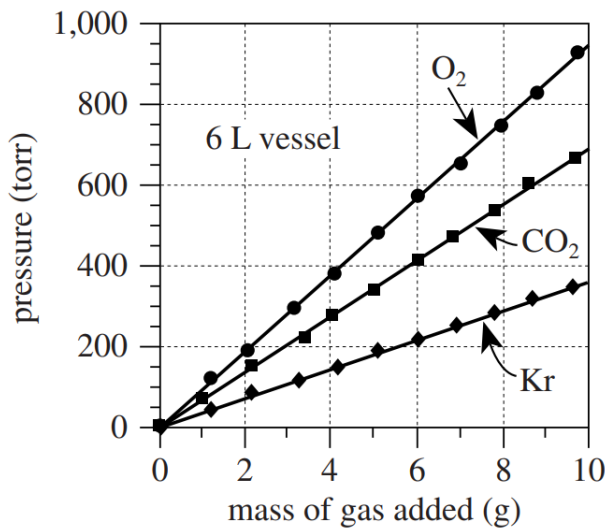


Figure 2

### Key concepts for questions:

\_\_\_\_\_ : where are you told to look? Figure 1? Table 2?

\_\_\_\_\_ : any numbers mentioned in the question are HUGELY important.

### Key concepts for answer choices:

\_\_\_\_\_ : how is an answer choice set-up?

\_\_\_\_\_ : Below? Above? If not, then in-between.

\_\_\_\_\_ : 50/50 is a great start.

\_\_\_\_\_ : what is it not, not what is it?

\_\_\_\_\_ : does it make sense?

1. Based on Figure 2, if 13 g of Kr had been added to the 6 L vessel, the pressure would have been:

- A. less than 200 torr.
- B. between 200 torr and 400 torr.
- C. between 400 torr and 600 torr.
- D. greater than 600 torr.

2. Suppose the experiments had been repeated, except with a 5 L vessel. Based on Figures 1 and 2, the pressure exerted by 7 g of CO<sub>2</sub> would most likely have been:

- A. less than 500 torr.
- B. between 500 torr and 1,000 torr.
- C. between 1,000 torr and 1,500 torr.
- D. greater than 1,500 torr.

3. Based on Figures 1 and 2, for a given mass of  $O_2$  at  $22^\circ C$ , how does the pressure exerted by the  $O_2$  in a 6 L vessel compare to the pressure exerted by the  $O_2$  in a 3 L vessel? In the 6 L vessel, the  $O_2$  pressure will be:

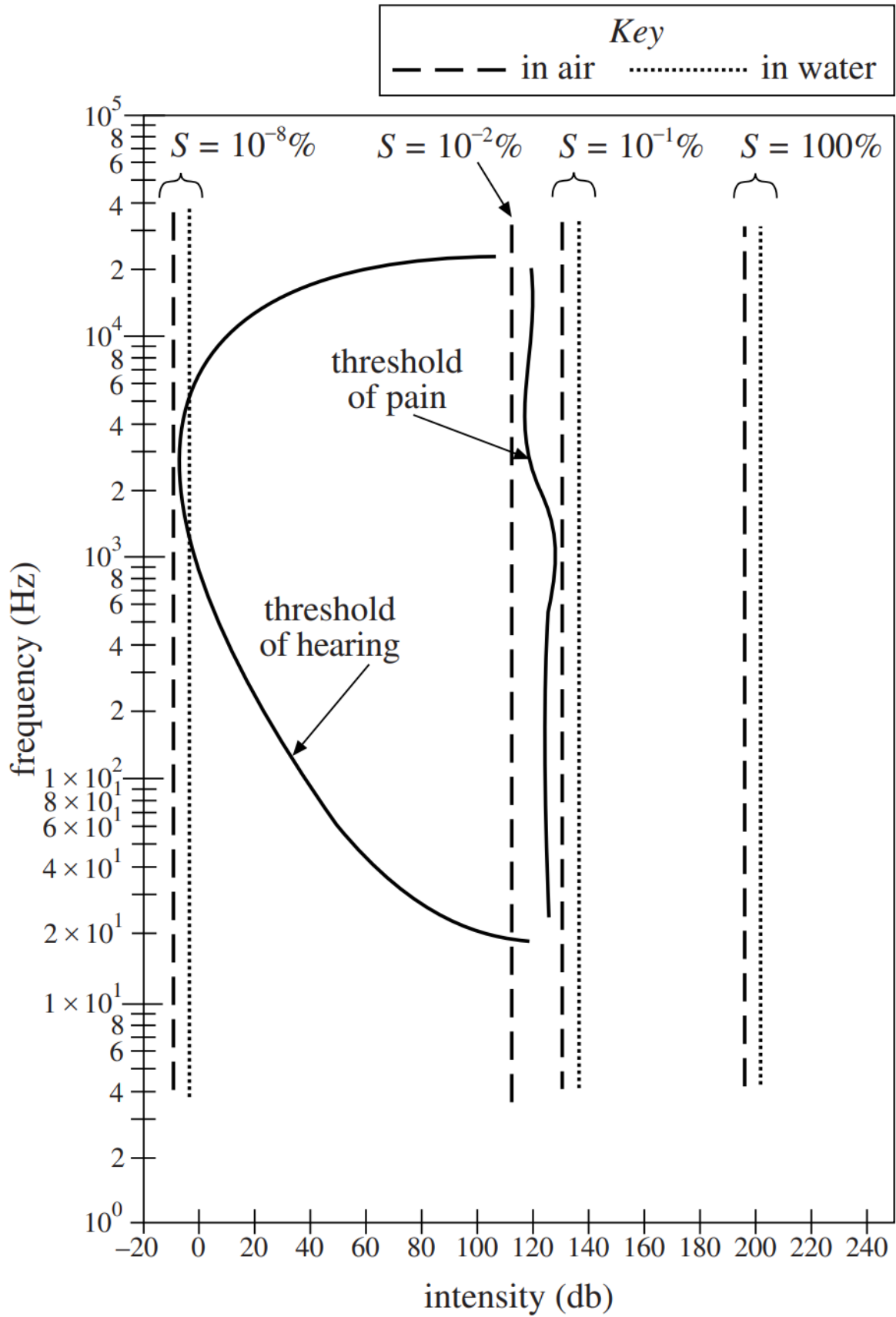
- A.  $\frac{1}{2}$  as great as in the 3 L vessel.
- B. the same as in the 3 L vessel.
- C. 2 times as great as in the 3 L vessel.
- D. 4 times as great as in the 3 L vessel.

4. Which of the following best explains why equal masses of  $O_2$  and  $CO_2$  at the same temperature and in the same-size vessel had different pressures? The pressure exerted by the  $O_2$  was:

- A. less, because there were fewer  $O_2$  molecules per gram than there were  $CO_2$  molecules per gram.
- B. less, because there were more  $O_2$  molecules per gram than there were  $CO_2$  molecules per gram.
- C. greater, because there were fewer  $O_2$  molecules per gram than there were  $CO_2$  molecules per gram.
- D. greater, because there were more  $O_2$  molecules per gram than there were  $CO_2$  molecules per gram.

5. Suppose the experiment involving  $O_2$  and the 6 L vessel had been repeated, except at a room temperature of  $14^\circ C$  (instead of  $22^\circ C$ ). For a given mass of  $O_2$ , compared to the pressure measured in the original experiment, the pressure measured at  $14^\circ C$  would have been:

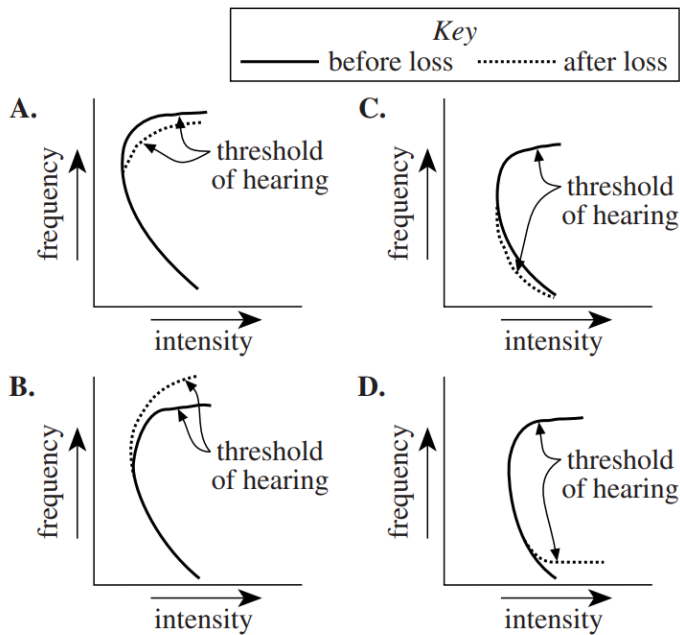
- A. less, because pressure is directly proportional to temperature.
- B. less, because pressure is inversely proportional to temperature.
- C. greater, because pressure is directly proportional to temperature.
- D. greater, because pressure is inversely proportional to temperature.



6. According to the figure, which of the following is closest to the lowest frequency that can be heard by a human being?

- A. 8 Hz
- B. 20 Hz
- C. 1,000 Hz
- D. 20,000 Hz

7. As humans age, it is common for selective hearing loss to occur at high sound frequencies. Which of the following figures best illustrates this loss?



8. Based on the figure, a sound of a given frequency will have the highest intensity for which of the following sets of conditions?

	<u>Sound is passing through:</u>	<u><i>S</i></u>
A.	water	100%
B.	water	$10^{-8}\%$
C.	air	100%
D.	air	$10^{-8}\%$

9. A student hypothesized that sounds of any intensity at a frequency of  $10^5$  Hz would be painful for humans to hear. Do the data in the figure support this hypothesis?

A. Yes, because the threshold of pain is relatively constant with changes in frequency.

B. Yes, because as frequency increases above  $10^5$  Hz, the threshold of pain increases.

C. No, because humans cannot hear sounds at  $10^5$  Hz.

D. No, because the threshold of pain is relatively constant with changes in frequency.

10. Based on the figure, does  $S$  depend on the frequency of a sound wave of a given intensity?

A. Yes, because as frequency increases,  $S$  increases.

B. Yes, because as frequency increases,  $S$  remains constant.

C. No, because as frequency increases,  $S$  increases.

D. No, because as frequency increases,  $S$  remains constant.

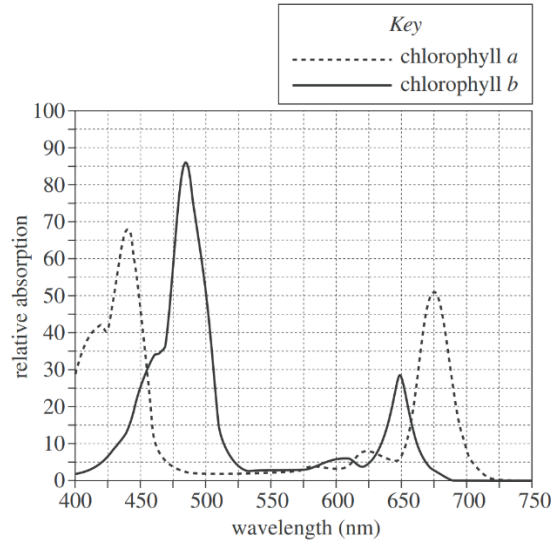


Figure 1

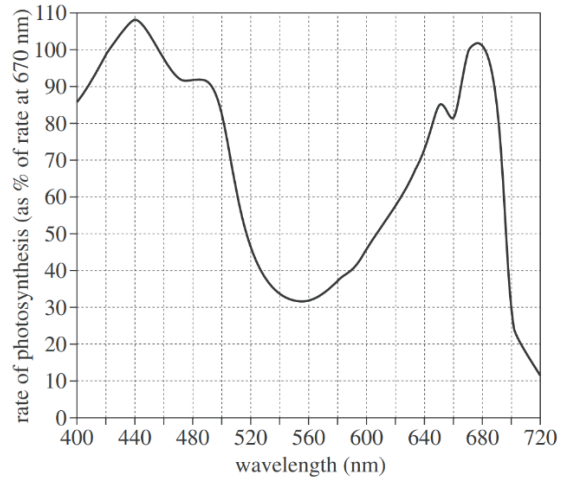
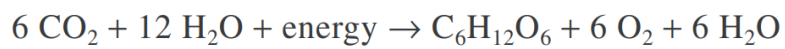


Figure 2

Color	Wavelength (nm)
Violet	380–430
Blue	430–500
Green	500–565
Yellow	565–585
Orange	585–630
Red	630–750





11. Based on Table 1 and Figure 1, which color of light is associated with the wavelength of light that results in the greatest absorption by chlorophyll *b*?

- A. Blue
- B. Green
- C. Yellow
- D. Red

12. In eukaryotic organisms, the chemical reactions associated with the chemical equation shown in the passage typically occur within which of the following structures?

- A. Chloroplasts
- B. Mitochondria
- C. Lysosomes
- D. Nuclei

13. In Figure 2, at which of the following wavelengths does the rate of photosynthesis exceed the rate of photosynthesis at 670 nm?

- A. 400 nm
- B. 430 nm
- C. 630 nm
- D. 700 nm

14. In the chemical equation shown in the passage, the carbon in CO<sub>2</sub> becomes part of which of the following types of molecules?

- A. Fat
- B. Sugar
- C. Protein
- D. Nucleic acid

15. Which of the following conclusions is best supported by Figures 1 and 2? The wavelength that results in the highest rate of photosynthesis also results in the:

- A. lowest relative absorption by chlorophyll *a*.
- B. lowest relative absorption by chlorophyll *b*.
- C. highest relative absorption by chlorophyll *a*.
- D. highest relative absorption by chlorophyll *b*.

## Question Wording

“...most effectively...”

“...least likely...”

“...provides the best evidence...”

In reading a question, be sure to \_\_\_\_\_ it, just as you would translate anything written in a foreign language.

1. Data in the graph provide most direct support for which idea?
2. It can reasonably be inferred from the table that omnivorous animals prefer to eat under which circumstances?
3. The differences between the cell structures of plant and animal cells can most likely be attributed to which of the following?
4. Which of the following best illustrates the relationship between atmospheric carbon dioxide and ocean acidification?
5. Which of the following most accurately describes the relationship between the data shown in the graph?
6. Which of the following graphs best support the conclusion that plants grow best when daytime temperature are between 10 – 15 degrees higher than nighttime temperatures?
7. All of the following are possible solutions to the system of equations EXCEPT:
8. If a botanist wishes to replicate this experiment at a higher altitude, which variable should the botanist adjust to account for a potential change in atmospheric oxygen saturation?
9. Of the species listed below, which is NOT a primary consumer?