

## ADVANCED BIOLOGY

### Chapter 1 PROBLEM-SOLVING QUESTIONS

Answer the following questions using complete sentences on a separate piece of paper.

*Assume that you have just entered a sauna where the temperature is 100° F.*

1. Describe your body reactions that would attempt to counteract the high environmental temperature.
2. Name at least four body systems AND briefly describe how each might be involved.

*Assume that you have just entered a meat locker where the temperature is 32° F.*

3. Describe what would happen with your body's reactions to this situation.
4. How do both of these situations illustrate the body's reactions to maintain homeostasis?

*Using the terms of relative body position (superior, inferior, anterior, posterior, medial & lateral), describe the position of the following:*

5. the stomach relative to at least three other organs in the abdominal cavity
6. the left lung relative to at least three other structures in the thoracic cavity

*During cadaver lab, you make a cross-section cut of the body through the diaphragm.*

7. Which body cavities do you separate?
8. Name at least three organs that you would see in the superior cavity.
9. Name at least four organs that you would see in the inferior cavity.

*Consider an appendage of your choice.*

10. Make a statement about the relative position of a structure/part of that appendage using the term distal.
11. Make a statement about the relative position of another (different) structure/part of that same appendage using the term proximal.