

## I. What is homeostasis?

A. The ability of all living things to  
in response to a changing internal or external environment.

B. All organ systems work \_\_\_\_\_ to achieve homeostasis.

## II. What are some examples of things that need to be kept within a certain range in our bodies?

A. \_\_\_\_\_ (Body Temperature)

B. Blood

C. Blood \_\_\_\_\_ level

D. \_\_\_\_\_ levels in blood

E. \_\_\_\_\_ (Water Balance)

## III. How does homeostasis work?

A. \_\_\_\_\_ = Body systems and structures  
communicate and work together to keep levels and processes within  
normal ranges

B. Involves \_\_\_\_\_ or \_\_\_\_\_ Regulation

a. \_\_\_\_\_ produces and secretes  
that regulate many body processes.

b. \_\_\_\_\_ sends message out to the body by  
\_\_\_\_\_. (= chemical released at the end of a  
nerve causing a transfer of impulse to another nerve, a muscle, or  
other structure)

C. \_\_\_\_\_ and \_\_\_\_\_ react to a change  
( \_\_\_\_\_ ) in the internal or external environment and  
make sure that conditions remain \_\_\_\_\_ favorable.

a. **Receptor:** \_\_\_\_\_ which monitor

(send signals to the brain)

b. **Effector:** \_\_\_\_\_ (usually a gland or muscles) which  
; Receive signals from the brain  
and make a response.