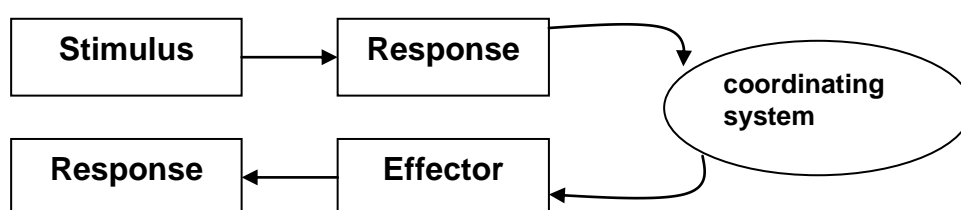


# Homeostasis

- ◆ Homeostasis – This is the tendency to maintain stability or uniformity in an organism's internal environment. A balance is maintained of t \_\_\_\_\_, and of chemicals such as water, salts and g \_\_\_\_\_.
- ◆ A Stimulus-Response Model



- ◆ Maintaining Human Body Temperature (37°C)
  1. If body temperature rises above 37°C – The skin produces \_\_\_\_\_ which cools the body by using excess body heat to \_\_\_\_\_ it. Also the body can consume \_\_\_\_\_ drinks, find cool shade, radiate heat through the \_\_\_\_\_ or by breathing out warm air, and by defaecation or urination.
  2. If body temperature falls below 37°C – The muscles may \_\_\_\_\_ to produce heat through friction, skin muscles may contract to produce insulating air pockets next to the skin with 'goosebumps' and upright hairs, and the person consumes \_\_\_\_\_ drinks or finds warm shelter.
- ◆ Maintaining Water Balance

Water is essential to the body for chemical reactions to take place within cells.

The amount of water consumed should \_\_\_\_\_ the amount of water lost through breathing out, sweating, urination and defaecation.
- ◆ Maintaining Salt Balance

Excess salt in humans is excreted in both \_\_\_\_\_ and \_\_\_\_\_.