Maintaining Life

What do we need to survive?

To maintain life, We need

- To ___________________________ – we need to check our insides in and our outsides out.
- ___________________________ – we need to move around, but we also need to move things around inside of us as well.
- ___________________________ (or ___________________________) – we need to be able to sense changes in our environment and react to them.
- ___________________________ – we need to be able to break down ingested food into simple molecules so they can be moved and used in the body.
- ___________________________ – we need to be able to perform chemical reactions in our bodies to break down and build up molecules.
- ___________________________ – we need to remove excreta (waste) from the body.
- ___________________________ – we need to be able to produce offspring, including on a cellular level as well as human reproduction.
- ___________________________ – we must be able to grow larger than a one cell organism and be able to repair damaged cells in our bodies.

What do we need to survive?

- Also known as our ___________________________. These must be in the proper amount and excess or shortage can be equally harmful.
- ___________________________ – achieved through diet, these are the chemicals needed to build cells or make energy
- ___________________________ – required by the body to make energy from food
- ___________________________ – makes up 60-80% of our body’s weight and provides the fluid base for body secretions and excretions
- ___________________________ – must stay around 37°C (98°F)
  - To ___________________________, metabolic reactions slow down and will eventually stop.
  - To ___________________________, body proteins began to break down
- ___________________________ – this is used from respiration.
  - If atmospheric pressure changes too much, the ___________________________ occurring in our lungs may be too low to support ___________________________.


- Describes the body’s ability to maintain relatively stable internal conditions even though the outside world is continuously changing.
- Literally means “____________________” (hemo = the ______________________; stasis = ______________________)
- However, it is a ______________________state of ______________________. In other words, it is constantly changing and trying to maintain certain internal conditions within a very narrow range.
- Constant ______________________in the body is vital and electrical impulses of the ______________________or ______________________will act as the ______________________.

How it works
- First, a ______________________ (a type of sensor that monitors and responds to changes in the environment) responds to a change known as a ______________________.
- It sends the information to the ______________________along the ______________________pathway (____________________)
- The control center analyses the information and determines the appropriate response.
- The control center sends instructions to the ______________________using the ______________________pathway (____________________).
- The results feed back to influence the stimulus, either as a ______________________ feedback mechanism (shut off stimulus or at least reduce its intensity) or a ______________________ feedback mechanism (increase the stimulus)

Figure 1.4