**Homeostasis**

**Homeostasis** - the maintenance of a stable internal environment in the body, even with a changing external environment

To maintain homeostasis, your body has to be able to do four things:
1) get nutrients and oxygen
2) get rid of wastes
3) keep a certain temperature
4) fight disease, viruses, or bacteria

If you can't maintain homeostasis, cells in your body can be damaged or die. This makes you sick, or can even make you die!

Your body is organized in a certain way to help your body maintain homeostasis. The smallest building block for all the parts of your body is a **cell**. The cell is the basic unit of all living things. Your body is made up of trillions of cells.
A group of similar cells that do the same thing is called a **tissue**. There are four kinds of **tissues** that make up the organs in your body:

1) **Epithelial tissue** - covers and protects tissues underneath.  
Example: your skin
2) **Nervous tissue** - sends electrical signals throughout the body.  
Example: your brain, nerves, and sensory organs (eyes, ears, etc.)
3) **Muscle tissue** - cells that contract and relax to produce movement  
Example: muscles
4) **Connective tissue** - joins, supports, protects, cushions, nourishes, and insulates organs. It even keeps organs from falling apart!  
Example: your bones, collagen, blood

**Organs** are a collection of two or more **tissues** that have a specialized function. That means the organ has a certain job to do.  
What are some organs in your body?
A group of **organs** that work together is called an **organ system**. What are the organs that make up the digestive system?

These organs all work together to do one thing: break down the food you eat into nutrients your body can use. Other organs in your body are part of other organ systems that have other jobs.

The **organ systems** in your body work together to help your body maintain homeostasis. There are 11 major organ systems, each one with a particular job: (p. 152-153)

1)  
2)  
3)  
4)  
5)  
6)  
7)  
8)  
9)  
10)  
11)
So in other words... Groups of cells make up tissues, which together make up organs, which together make up organ systems, which together make up an organism.