Introduction to Systems of the Body

Standards:

S7L2d. Explain that tissues, organs, and organ systems serve the needs cells have for oxygen, food, and waste removal.

S7L2e. Explain the purpose of the major organ systems in the human body (i.e., digestion, respiration, reproduction, circulation, excretion, movement, control and coordination, and for protection from disease).
Levels of Organization

- Cell
- Tissue
- Organ
- System
- Organism
1. **Chemical level**
   Atoms combine to form molecules.

2. **Cellular level**
   Cells are made up of molecules.

3. **Tissue level**
   Tissues consist of similar types of cells.

4. **Organ level**
   Organs are made up of different types of tissues.

5. **Organ system level**
   Organ systems consist of different organs that work together closely.

6. **Organismic level**
   The human organism is made up of many organ systems.
How is the human body like a city?
* Each cell works as part of a larger unit to perform some function for the organism. Processes carried out by individual cells directly relate to the performance of an organism’s tissues and organ systems.

* Functions of the major organ systems and relationships that exists make one system dependent on another to function properly.

* Every movement and/or action taken by one organ system directly affects other organ systems. Cellular energy is required by all cells that make up all systems in order for these movements/actions to take place.
Brainstorming Systems of the Body:

With a partner, write down names of any systems that make up the human body. Name organs of each system.
System of the Body
Body Systems
Working Together
Activity
Introduction to Systems of the Body Video

http://www.youtube.com/watch?v=nnjmrrQ6xOs