Explain how the following help you to move and be active?

1. Musculo-Skeletal System – Muscles pull on the bones at a joint, which causes the bones to move.
2. Nervous System – The brain signals all the other systems in your body to control your body’s activities. It sends a message to you circulatory and respiratory system that your body needs more oxygen, so your heart pumps faster and you breathe more air. Your brain also sense how and where you should move and sends signals to the muscles to contract or relax.
3. Circulatory System – Your heart rate increases when you perform a physical activity because your body needs a lot more oxygen. Your heart beats faster to supply your muscles with more oxygen to produce extra energy.
4. Respiratory System – When doing physical activity your body needs more oxygen. You breathe more quickly to deliver more oxygen to the blood.

Explain how your digestive system works and how does the excretory system help the digestive system?

* Your digestive system breaks down the food so that nutrients can be absorbed. Your digestive system starts in the mouth when you chew and swallow. Moist pieces of food then travel down the esophagus into your stomach. There, digestive juices break down the food into even smaller pieces, which then move into the small intestine. Waste products are removed from the blood by your excretory system. The liquid that the kidneys produce is called urine. The urine leaves each kidney through a tube called the ureter. The ureters are connected to your bladder. When your bladder is full, it sends a signal to your brain that you need to urinate to get rid of the waste.

How does the circulatory system impact our other systems?

* Your body needs oxygen from the air and nutrients from food to live and be healthy. Your heart works with your respiratory system to move oxygen and nutrients in the blood throughout your body. If your heart was not working properly, the blood would not flow properly. So, oxygen and other nutrients could not be delivered efficiently to the cells. You might feel weak and out of breath.

What are the benefits of eating healthy food?

* Eating the recommended amount of foods from each food group helps you get the right amount of vitamins, minerals and other nutrients for your body. It also lowers the risk of disease and helps you to be healthy and energetic. Without the proper amount of sleep, your nervous system cannot work well. You might be grouchy, tired or have slower reaction times. A tired body is also at greater risk of becoming sick with a cold or other illness. Eating right and having a healthy lifestyle helps you handle stress, assists your thinking, and gives you energy to enjoy life. Getting enough exercise keeps your heart and muscles in shape. Wearing safety equipment, such as a bike helmet can help prevent injuries.

How is your growth and development different from childhood to puberty? What emotional changes happen during puberty?

* During childhood, the entire body gets bigger. During puberty, the body continues to get bigger, but there are also changes in shape and appearance. Boys’ voices deepen and their shoulders broaden. Girls get fuller hips and become rounder. Both boys and girls grow hair in new places and develop oily skin. Adjusting to new hormones can cause emotional changes. Strong new emotions may occur, such as worrying about appearance, attraction to another person, become angry or upset or overly sensitive. In puberty we begin to desire more independence.

How has technology been used to help a person who is injured or hurt?

1. Artificial limbs
2. Replacement teeth
3. Organ (heart) transplants
4. Transplanting blood, bone marrow, a kidney or even skin from one person to another.