Body systems study sheet

What is an organ donation?

An organ (ex:heart) is taken from one person to another person

Name some organs that can be donated.

Heart, eyes, kidney, liver, skin etc…

If someone in Ontario wants to become a donor, what are the steps he/she must take?

You must sign your driver's license donor card or register with the OHIP registry. You must inform your family.

What is the Trillium Gift of Life Network?

This organization helps hospitals to know who most needs an organ transplant so that the organ goes to the most suitable person. It connects the donor, hospital surgeons, and patient in an efficient and confidential manner.

What is a living donor?

A living donor is someone who donates a kidney, or part of a liver etc... (often to a family member) who is in need. The donor will be able to live even after giving these organs away.

Name four functions / jobs that bones do for us.

a) Along with our muscles, they give our body shape and structure

b) They protect our inner organs (ex: ribs protect heart)

c) They allow our body to move around

d) Bone marrow helps reproduce new fed and white blood cells to replace the ones that are worn out.

What is a fracture? How does a fracture heal?

A fracture is a bone that becomes broken. When a bone breaks, blood vessels bleed and form a clot around the break. New cartilage forms and holds the two parts of the bone together. Bone cells grow back over a period of months and the bone becomes strong and healthy.

What is meant by the term *periosteum?*

The outside of a bone is that is made up of a dense layer of collagen. Blood vessels and nerves run through it.

What job is done by bone *marrow?*

Bone marrow helps reproduce new fed and white blood cells to replace the ones that are worn out.

What is a tendon?

A bundle of strong fibrous tissues that attach muscles to bones.

What do joints do? Give three examples of joints?

A joint is the place where two bones meet allowing for movement. Some examples include a ball and socket joint (shoulder), a pivot joint (elbow), and a hinge joint (knee)

How do biceps and tri-ceps work together?

When one muscle contracts or pulls, the other muscle relaxes. Muscles can only pull; they cannot push.

What is an *involuntary* muscle? Give some examples.

A muscle that is involuntary is a muscle that works automatically with you thinking about it. Some examples include your heart muscle, stomach, and intestinal muscles. There are three kinds of muscles: skeletal muscles, cardiac muscles (around the heart), and smooth muscles (involuntary muscles in your heart, esophagus, stomach, and intestines).

***Be prepared to label either the skeletal system or the muscular system for Wednesday's test.**

What is meant by the term *reaction time?*

Reaction time is the amount of time it takes a person to respond to a stimulus. For example, a driver of a car applies the brakes. It takes time for a message to travel from the eyes to the brain, and for the brain to respond with a message to the feet to apply the brakes and stop the car.

Name five things we can do to remain healthy:

Eat healthy foods (fruit, vegetables, meat and dairy products)
Get enough exercise (at least an hour a day)
Get enough sleep
Wash your hands thoroughly before eating
Avoid contaminated water.

Be prepared to complete the following chart on the nervous system

cranium	A skull that protects your brain.
cerebrum	The largest section of the brain that controls your thinking. Your five senses are processed here
cerebellum	The cerebellum controls your balance, posture, coordination, and voluntary muscles.
brain-stem	The brain-stem controls your breathing, heart rate, thirst, and coughing
spinal cord	This long rod of nerve tissues (protected by the vertebrae) transports nerve impulses from every part of the body to your brain.
neurons	Neurons branch out from the spinal cord. Sensory nerves carry messages to the brain. Motor nerves carry messages from the brain to the body

Be prepared to explain what each of the following parts of our body do in the process of *digestion*

mouth	Teeth, tongue, and saliva break down the food.
epiglottis	A little flap on the top of the windpipe to prevent food from going down the wrong tube.
esophagus	Muscles and saliva guide food to the stomach.
stomach	Muscles and acidic juices make food soft and gooey.
small intestine	Digestion takes place here. Villi remove nutrients and send them to the bloodstream.
large intestine	Water is absorbed here. Muscles push out food waste out through the anus.