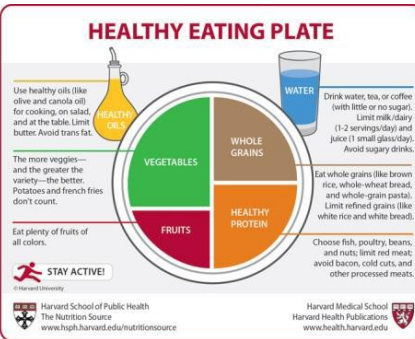
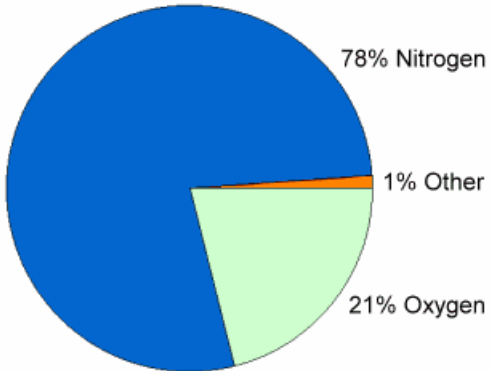


NAME _____

3.1: Review Sheet


3.1.a. What are the resources the human body needs to survive?

<p>Name of resource</p> <p>How long can you survive without it?</p>	<p>Name of resource</p> <p>How long can you survive without it?</p>	<p>Name of resource</p> <p>How long can you survive without it?</p>
<p>Includes macromolecules (lipids, carbs, and proteins) as well as minerals and vitamins.</p>	<p>Taken in through both food and drink (55% of the body is made of this resource).</p>	<p>Air around us is about 20% of this gas necessary for human survival.</p>
	<p>Your very own body of water The average human body is composed of about 55% water. The average adult male is about 60% water, the average adult female about 50% water.*</p> <p>How much water is that? An average adult male with a weight of 80 kg (about 176 lbs) and a water content of 60%, would contain 48 kg or 48 L of water, equal to eight cases of standard-size bottled water.**</p> <p>Where is all of that water? All parts of the body contain some water. Here are some of the more "watery" parts.</p> <ul style="list-style-type: none"> Lungs: 90% water Blood: 82% Skin: 80% Muscle: 75% Brain: 70% Bones: 22% <p><small>* Muscle contains more water than fat does. Males generally have higher muscle content than females. ** 1 litre of water weighs 1 kilogram. A standard size container of bottled water is 500 mL. © Environment Canada, 2004</small></p>	<p>Relative composition of air</p> 

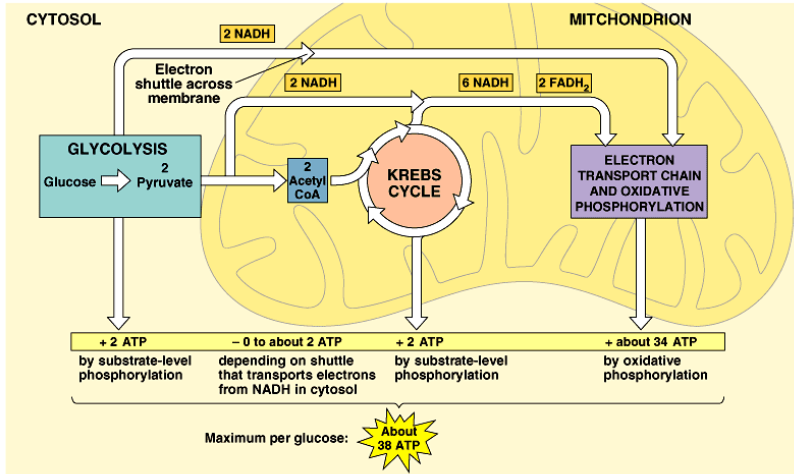
3.1.b. What role does food play in the human body?

Carbohydrates	
Lipids	
Proteins	

3.1.c. What role does water play in the human body?

<ul style="list-style-type: none"> • Dissolves materials and allows them to be transported in blood • Gives cells structure • Allows for digestion and absorption of nutrients in intestinal walls into bloodstream • Carries away waste products (urine) • Helps transmit electrical messages (nervous system) • Regulates body temperature • Lubricates structures (joints and organs) • Protective barrier around organs 	
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3.1.d. What role does oxygen play in the human body?



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Oxygen allows humans to metabolize fuel (food) creating energy in the form of _____. Every cell in the human body needs oxygen to survive. Cells turn _____ + _____ into energy within mitochondria. Without oxygen we can't process food or make energy.

3.1.e. What human body systems work to create, process, or distribute the body's main power sources?

Food	Water	Oxygen
Nutrients are broken down by the _____ system and transported throughout the body by the _____ system. The _____ is also involved by providing key hormones responsible for the digestion and maintenance of blood-sugar levels.	Taken in through the _____ system and transported throughout the body by the _____ system. Wastes are removed by the _____ system to maintain homeostasis of fluid levels.	Taken in through the _____ system and transported throughout the body by the _____ system.
	<p>Components of the Urinary System</p>	

3.1.f. How do personal factors and environmental factors impact the body's ability to survive without air, food, or water?

Personal	Environmental
<ul style="list-style-type: none"> Fitness level; age; will to survive, mental ability; amount of fat; genetic factors; metabolism 	<ul style="list-style-type: none"> Temperature of air, land, water; protective clothing, availability of natural resources, avoidance of predators (!)