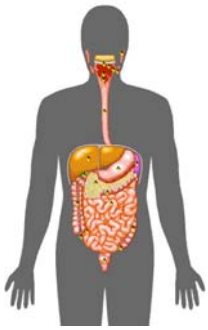
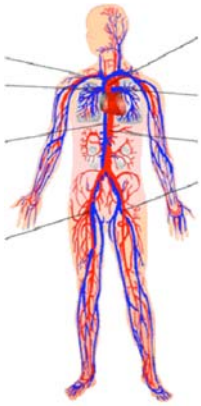
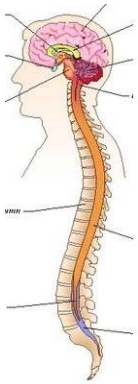
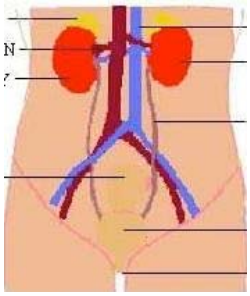
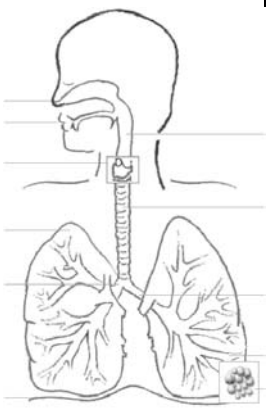
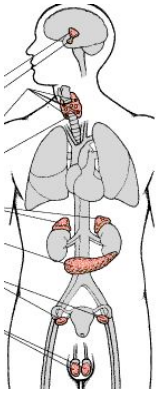
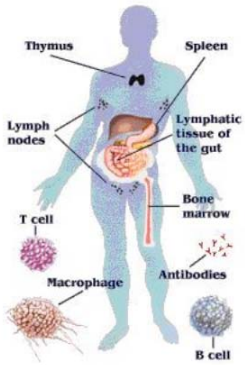
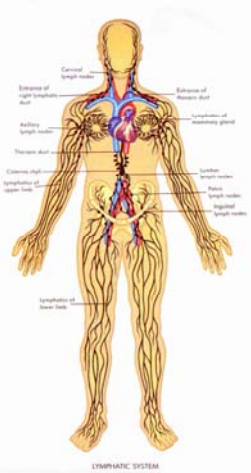
Name _____ Period _____ Date _____

THE HUMAN BODY SYSTEMS

System	Function	Diagram	Major Organs	Interactions- Working with Other Systems
				1. w/circulatory – absorb & deliver the digested nutrients to the cells 2. w/muscular – control the contractions of many of the digestive organs to pass food along 3.w/nervous – hypothalamus maintains homeostasis by triggering appetite (stomach growling), digest.
Circulatory				1. w/respiratory – deliver O_2 from lungs to cells and drop off CO_2 from cells to lungs 2. w/digestive – absorb and deliver digested nutrients to cells 3. w/excretory – kidneys filter cellular waste out of blood for removal 4. w/lymphatic – both transport things to and from cells 5. w/immune – transports WBCs throughout body to fight disease 6. w/nervous – brain controls heartbeat 7. w/endocrine – trans. hormones
				Controls all other systems Hypothalamus – maintains homeostasis by working with all systems

System	Function	Diagram	Major Organs	Interactions- Working with Other Systems
Excretory				1. w/circulatory – filters waste out of blood 2. w/lungs – removes excretory waste 3. w/integumentary – removes excretory waste
Respiratory				1. w/circulatory – takes in O_2 for delivery to cells and removes CO_2 brought from cells 2. w/excretory – removes excretory waste 3. w/nervous – controls breathing 4. w/muscular – diaphragm controls breathing
Skeletal				1. w/muscular – allow movement 2. w/circulatory – produce blood cells 3. w/immune – produce white blood cells 4. w/circulatory and respiratory – protects it's organs

System	Function	Diagram	Major Organs	Interactions- Working with Other Systems
Muscular				1. w/skeletal – allow movement 2. w/digestive – allow organs to contract to push food through 3. w/respiratory – diaphragm controls breathing 4. w/circulatory – controls pumping of blood (heart) 5. w/nervous – controls all muscle contractions
Endocrine	Regulates body activities using hormones. Slow response, long lasting		Glands *Hypothalamus *Pituitary *Thyroid *Thymus *Adrenal *Pancreas *Ovaries *Testes Glands produce Hormones	1. w/circulatory – transports hormones to target organs 2. w/nervous – maintain homeostasis, hormone release 3. w/reproductive – controlled by hormones 4. w/skeletal – controls growth of bones
Immune	Fights off foreign invaders in the body		White Blood Cells *T cells *B cells -produce antibodies *Macrophages Skin	1. w/circulatory – transports WBCs to fight invaders 2. w/lymphatic – has lots of WBCs to fight invaders, spleen filters bacteria/viruses out of blood 3. w/skeletal – WBCs made in bone marrow 4. w/integumentary – prevents invaders from getting in

System	Function	Diagram	Major Organs	Interactions- Working with Other Systems
Integumen-tary	1. barrier against Infection (1st line of defense) 2. helps regulate body temp. 3. removes excretory waste (urea, water) 4. protects against sun's UV rays 5. produces vitamin D			1. w/excretory – removes cellular waste 2. w/nervous – controls body temperature (sweating, goose bumps) 3. w/immune – prevents pathogens from entering
Lymphatic	1. stores and carries WBC's that fight disease 2. collects excess fluid and returns it to blood (2nd circulatory system-reaches places other one can't – between cells)		Lymph (liquid part of blood – plasma, when it's in lymph vessels) Lymph Vessels Lymph Nodes Contain WBCs	1. w/immune – holds lots of WBCs to fight pathogens 2. w/circulatory – to transport materials to and from cells