

Science Curriculum Anatomy/Physiology  
Cross County School

Science Skill	Concept	District Objective	Curricular Indicator	Performance Level	Pacing	Instructional Materials/ Class Activities	Intervention	Assessment Local	Assessment NeSA
		Distinguish between anatomy and physiology and describe the divisions of anatomy.							
		Identify the directional terms and body planes by using examples.							
		Describe the six levels of structural organization.							
		Identify the primary regions of the body.							
		Describe the five characteristics of life.							
		Define the term tissue and indicate the four primary types of tissue found in the body.							
		Describe the structural characteristics of epithelial tissue and indicate its common functions.							
		Distinguish between the types of connective tissue on the basis of their structures and functions.							
		Describe the characteristics of muscle tissue and indicate the three types.							
		Define the term membrane and distinguish between the types of membranes found in the body.							
		Identify the basic functions of the integumentary system.							
		Distinguish between the two layers of the skin on the basis of structure and function.							
		Identify the layers of the epidermis, and describe the changes that occur in the cells as they are pushed toward the surface.							
		Describe the structure and function of the hypodermis.							
		Identify and describe the five functions of the skeletal system							
		Distinguish between the long bones, short bones, flat bones, and provide examples of each.							
		Describe the inorganic and organic components of bone tissue and distinguish between the three types of bone cells on the basis of their functions.							
		Describe the microscopic structure of compact bone and compare it with that of spongy bone.							
		Describe the process of bone growth in length and width.							
		Identify the 206 bones of the skeleton and their major features.							

Science Curriculum Anatomy/Physiology  
Cross County School

Science Skill	Concept	District Objective	Curricular Indicator	Performance Level	Pacing	Instructional Materials/ Class Activities	Intervention	Assessment Local	Assessment NeSA
		Distinguish between the types of joints and define the movements that occur there.							
		Identify the primary functions of muscles.							
		Describe the connective tissues associated with muscle.							
		Identify and describe the microscopic components of the neuromuscular junction.							
		Explain the sliding filament mechanism of muscle contraction.							
		Indicate the role of ATP in muscle contraction and how the energy is supplied.							
		Define threshold stimulus and relate it to the concept of the all-or-none response.							
		Define origin and insertion and describe how muscle contraction produces movement by way of group actions.							
		Identify the major muscles on the basis of their locations, origins, insertions, and actions.							
		Identify the types of neurons.							
		Describe the events involved in maintaining a resting potential and in initiating an action potential.							
		Identify the protective coverings of the brain and spinal cord.							
		Describe the conductive pathways of the spinal cord and reflex arc.							
		Identify the ventricles of the brain and explain how cerebrospinal fluid is produced and circulated.							
		Distinguish between the parts of the brain on the basis of structural and functional differences.							
		Identify the organs of the PNS.							
		Distinguish between cranial nerves and spinal nerves and describe how spinal nerves branch.							
		Distinguish between the somatic and autonomic nervous system on the basis of their effectors and pathways.							
		Identify the three primary functions of blood.							
		Describe the properties of blood.							

Science Curriculum Anatomy/Physiology  
Cross County School

Science Skill	Concept	District Objective	Curricular Indicator	Performance Level	Pacing	Instructional Materials/ Class Activities	Intervention	Assessment Local	Assessment NeSA
		Distinguish between plasma and formed elements.							
		Identify the dissolved substances in plasma.							
		Distinguish between the formed elements on the basis of their concentrations in blood, their structure, and their major function.							
		Indicate the function of hemoglobin.							
		Distinguish between the types of WBC's on the basis of their functional and structural differences.							
		Identify the location and general features of the heart.							
		Describe the layers of the pericardium.							
		Identify the layers of the heart wall.							
		Describe the structure of the atria and ventricles.							
		Describe the structure and function of the heart valves							
		Trace the flow of blood through the chambers of the heart and through the body.							
		Identify the sounds of the heart and relate them to the cardiac cycle.							
		Describe the components and function of the heart conduction system.							
		Identify the electrical events measured in a normal electrocardiogram.							
		Distinguish between the types of blood vessels on the basis of their structure.							
		Identify the two divisions of the digestive system.							
		Describe the components of the peritoneum and the organs they are associated with.							
		Describe the structural features of the stomach and identify its functions.							
		Identify the regulatory mechanisms of pancreatic secretions.							
		Describe the structure and functions of the liver and gall bladder.							
		Describe the structure and functions of the small intestine and the large intestine.							