
Student Name

High School or Vocational Center

COMPETENCY RECORD FOR ARTICULATION

**Health & Human Service Programs
Baker College**

To successfully complete this course, all performance objectives must be fulfilled with a minimum score of 75%. This will be determined through testing and lab projects.

SCI 100E BASIC HUMAN ANATOMY

Task	Satisfactory	Unsatisfactory
Define the terms anatomy and physiology.		
Identify the major organ systems of the body and list the major organs associated with each.		
Define metabolism, including anabolism and catabolism and define ATP.		
Define homeostasis and explain its importance.		
Relate the main directional terms, planes, cavities, and body regions used in human anatomy.		
Discuss the study of chemistry, including:		
a. The definition of matter, atoms, and molecules.		
b. The chemical elements and give examples of the principal elements found in the human body.		
c. Definitions of the terms acid, base, and salt.		
Identify the structure and function of the cell and name and describe the main organelles in the cell as well as the transport mechanisms of the cell.		
Differentiate the four main groups of tissues and give the location and general characteristics of each.		
Describe body membranes.		
Distinguish the structure of the integumentary system, including the accessory structures.		
Describe the structure of the skeletal system, including:		
a. The microscopic and gross structures of bone:		
1. Osteoblasts, osteocytes, and osteoclasts.		
2. Diaphysis, epiphysis, periosteum, endosteum, red marrow, and yellow marrow.		

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b. Differentiate between compact bone and spongy bone with respect to structure and location.		
c. List and identify the 206 bones of the body.		
d. List the three main types of joints comparing their structures and degrees of movements.		
Identify the structure of the muscular system, including:		
a. A comparison of the three muscle types.		
b. A discussion of the structure of skeletal muscle.		
c. A definition of origin, insertion, prime mover, and antagonist.		
d. Identify the major muscles in each skeletal muscle group. Including: temporalis, orbicularis oculi, orbicularis oris, masseter, sternocleidomastoid, trapezius, deltoid, pectoralis major, biceps brachii, external oblique, internal oblique, rectus abdominus, sartorius, quadriceps femoris group, tibialis anterior, gastrocnemius, soleus, triceps brachii, latissimus dorsi, gluteus maximus, hamstring group.		
Differentiate the divisions of the nervous system.		
Identify the major structures of the nervous system, including:		
a. An illustration of the principal parts of a typical neuron.		
b. A definition of a nerve impulse, including synapse and neurotransmitters.		
c. A description of the structure of the spinal cord, including tracts and nerves.		
d. The 31 pairs of spinal nerves.		
e. The divisions and general functions of the autonomic nervous system.		
f. The major divisions of the brain and their basic structure and function.		
g. The structure of the meninges.		
h. A description of cerebrospinal fluid.		
i. The 12 pairs of the cranial nerves and describe the general functions of each.		
Identify the structure of the sensory system, including:		
a. The structures of the eye.		
b. The structures of the ear.		
c. The sense of taste.		
d. The sense of smell.		
e. The general senses.		

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Identify the structure and foundation of the endocrine system, including:		
a. A definition of a hormone.		
b. The location of the following endocrine glands and the principal hormones and the function of each:		
1. Hypothalamus.		
2. Anterior pituitary gland.		
3. Posterior pituitary gland.		
4. Thyroid gland.		
5. Parathyroid glands.		
6. Adrenal glands.		
7. Pancreas.		
8. Testes.		
9. Ovaries.		
10. Thymus gland.		
11. Pineal gland.		
c. A definition of prostaglandins.		
Describe the composition of blood, including:		
a. The major components of blood plasma.		
b. The structure and function of erythrocytes.		
c. The five types of leukocytes and describe their function.		
d. The structure and function of blood platelets.		
e. A definition of hemostasis.		
f. A description of the ABO and Rh blood groupings.		
g. A brief description of a complete blood count.		
Describe the structure of the cardiovascular system, including:		
a. The location, size, and coverings of the heart.		
b. The layers of tissue composing the heart.		
c. The chambers and valves of the heart.		
d. A description of coronary circulation.		
e. The components of the heart's conduction system.		
f. A description of the structure of the blood vessels.		
g. A comparison of pulmonary and systemic circulation.		
h. A description of hepatic portal circulation.		
i. The principal arteries and veins of the body.		

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Describe the structure of the lymphatic system, including:		
a. The composition of lymph and how it is formed.		
b. The flow of lymph through the lymphatic vessels.		
c. The structure of lymph nodes.		
d. The structure of the tonsils, thymus gland, and spleen.		
e. The definition of specific and nonspecific immunities.		
f. A definition of antigen and antibody.		
Relate the structure of the respiratory system, including:		
a. A definition of respiration.		
b. A description of the organs of the respiratory system:		
1. Nasal cavities.		
2. Pharynx.		
3. Larynx.		
4. Trachea.		
5. Bronchi and Bronchioles.		
6. Lungs.		
c. A description of the mechanisms for pulmonary ventilation, including:		
1. Inhalation.		
2. Exhalation.		
3. Gas Exchanges.		
d. Demonstrate an understanding of gas transport through the body.		
Describe the structure of the digestive system, including:		
a. The structure of the four layers of the digestive tract wall.		
b. The peritoneum.		
c. The structure of the main organs of the digestive tract:		
1. Mouth.		
2. Pharynx.		
3. Esophagus.		
4. Stomach.		
5. Small intestine.		
6. Large intestine.		
d. The structure of the accessory organs:		

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1. Liver.		
2. Gallbladder.		
3. Pancreas.		
e. The process of digestion.		
f. A description of "absorption."		
Relate the structure of the urinary system, including:		
a. The organs of the urinary system and the structure and location of each, including:		
1. Kidneys.		
2. Ureters.		
3. Urinary bladder.		
4. Urethra.		
b. Discuss the process micturition (urination).		
c. Describe the composition of urine in relationship to a urinalysis.		
d. A description of fluid and electrolyte balance.		
e. A definition of "pH" and "acid-base balance."		
Describe the structure of the male reproductive system, including:		
a. The primary and accessory organs of the male reproductive system.		
b. The formation and composition of semen.		
c. A discussion of hormonal control of male reproduction.		
Describe the structure of the female reproductive system, including:		
a. The primary and accessory organs of the female reproductive system.		
b. A discussion of the hormonal control of the menstrual cycle.		
Analyze the scientific method.		

Teacher signature _____ Date _____