

Instructor: Mr. Maksimchuk	Course/Grade Level: Anatomy A	Week: 2
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Unit 1: Intro to Anatomy	Evidence of Learning/Assessments Weekly Socratic Quiz, Unit Test
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Standards (Learning Targets)	" I can ---- "	Instructional Strategies
	I can describe the difference between anatomy and physiology	Guided notes
	I can place the organization levels of the human body in order.	Guided notes, cards for levels of organization
	I can define homeostasis and give real world examples	Guided notes, video, lab
	I can define parts of the body using anatomical positions vocab words.	Guided Notes, flash cards, styrofoam examples

Key Vocabulary

Homeostasis	Integumentary	Excretory	Responsiveness	Growth	Anterior
Positive Feedback	Circulatory	Nervous	Assimilation	Movement	Ventral
Negative Feedback	Respiratory	Endocrine	Metabolism	Differentiation	Posterior
Anatomy	Immune	Lymphatic	Abdominal cavity	Anatomical Position	Dorsal
Physiology	Digestive	Reproductive	Thoracic cavity	Superior	Proximal
Skeletal	Muscular	Cranial cavity	Spinal cavity	Inferior	Distal

Instructor: Mr. Maksimchuk	Course/Grade Level: Anatomy A	Week: 3
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Unit 1: Intro to Anatomy	Evidence of Learning/Assessments Weekly Socratic Quiz, Unit Test
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Standards (Learning Targets)	" I can ---- "	Instructional Strategies
	I can describe locations on the body using directional terms.	guided notes, trace the body
	I can locate the 4 main body cavities and explain what they hold.	guided notes, trace the body
	I can explain the job of all major systems of the body.	guided notes, video, trace the body

Key Vocabulary

Homeostasis	Integumentary	Excretory	Responsiveness	Growth	Anterior
Positive Feedback	Circulatory	Nervous	Assimilation	Movement	Ventral
Negative Feedback	Respiratory	Endocrine	Metabolism	Differentiation	Posterior
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Physiology	Digestive	Reproductive	Thoracic cavity	Superior	Proximal
Skeletal	Muscular	Cranial cavity	Spinal cavity	Inferior	Distal

Instructor: Mr. Maksimchuk	Course/Grade Level: Anatomy A	Week: 4
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Unit 2: Chemistry in the Body	Evidence of Learning/Assessments Weekly Socratic Quiz, Unit Test
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Standards (Learning Targets)	" I can ---- "	Instructional Strategies
	I can identify the 6 most common elements in organic substances	guided notes
	I can explain how carbon can join other carbon atoms to form large molecules	guided notes, calorie lab
	I can explain structure and function of 4 major organic molecules of living things	guided notes, 4 section poster, 'lava lamp'
	I can explain the process of cellular respiration and how it relates to the body	guided notes, breathing lab, poster activity
	I can explain the relationship of acids, bases and pH to the human body	guided notes, ph scale with items
	I can describe the difference of an acid and a base and identify examples of each	guided notes, ph scale with items
	I can show how the pH scale represents acids and bases	guided notes, ph scale with items

Key Vocabulary

Organic molecules	Phospholipids	Isotopes	Covalent bond	Protein	Nucleic acid
Inorganic molecules	Elements	Atomic Mass	Ionic bond	Steroid	
Lipids	Atoms	Atomic Number	Synthesis	Compound	
Carbohydrates	Nucleus	Neutrons	Decomposition	Molecule	
Fatty Acids	Protons	Electrons	Single replacement	Double replacement	

Instructor: Mr. Maksimchuk	Course/Grade Level: Anatomy A	Week: 5
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Unit 2: Chemistry in the Body	Evidence of Learning/Assessments Weekly Socratic Quiz, Unit Test
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Standards (Learning Targets)	" I can ---- "	Instructional Strategies
	I can explain the importance of an electrolyte	guided notes, sports drink commercial
	I can differentiate between the four types of reactions	guided notes
	I can identify whether two atoms will form a covalent bond or an ionic bond	guided notes
	I can identify the main types of organic and inorganic substances	guided notes
C4.8 A: Identify the location, relative mass, and charges of electron, neutrons, and protons. C4.8 D: Determine the number of protons & electrons in an ion.	I can find the atomic number and atomic mass of an element and calculate the number of protons, neutrons and electrons	Guided notes, practice problems

Key Vocabulary

Organic molecules	Phospholipids	Isotopes	Covalent bond	Protein	Nucleic acid
Inorganic molecules	Elements	Atomic Mass	Ionic bond	Steroid	
Lipids	Atoms	Atomic Number	Synthesis	Compound	
Carbohydrates	Nucleus	Neutrons	Decomposition	Molecule	
Fatty Acids	Protons	Electrons	Single replacement	Double replacemen	

Instructor: Mr. Maksimchuk	Course/Grade Level: Anatomy A	Week: 6
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Unit 3: Cells	Evidence of Learning/Assessments Weekly Socratic Quiz, Unit Test
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Standards (Learning Targets)	" I can ---- "	Instructional Strategies
	I can describe the 3 main parts of a composite cell.	cell parts notebook
	I can identify the main organelles of a cell and their respective functions	cell parts notebook, iPad game, multi genre project
	I can explain the difference between active and passive transport	guided notes, interactive animation

Key Vocabulary

Cell	Cytosol	Lysosomes			
Cell membrane	Mitochondria	Ribosomes			
Nucleus	Nucleolus	Cytoplasm			
Rough ER	Golgi Apparatus	Active transport			
Centrioles	Centrosome	Passive transport			
Peroxisomes	Nuclear Membrane				

Instructor: Mr. Maksimchuk	Course/Grade Level: Anatomy A	Week: 7
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Unit 3: Cells	Evidence of Learning/Assessments Weekly Socratic Quiz, Unit Test
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Standards (Learning Targets)	" I can ---- "	Instructional Strategies
	I can explain the steps of mitosis, when they happen and what organelles they involve.	guided notes, flip book, gym activity
	I can identify the steps of mitosis when shown microscope slides of each.	microscope lab
	I can explain the difference between anaerobic and aerobic respiration.	guided notes, relate to muscles

Key Vocabulary

Mitosis	RNA	Phosphate	Glycolysis		
Meiosis	DNA replication	Sugar group	ETC		
Interphase	DNA	Amino acid			
Prophase	Cellular respiration	Aerobic			
Metaphase	Chromosome	Anaerobic			
Anaphase	Telophase	Krebs cycle			

Instructor: Mr. Maksimchuk	Course/Grade Level: Anatomy A	Week: 8
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Unit 3: Cells	Evidence of Learning/Assessments Weekly Socratic Quiz, Unit Test
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Standards (Learning Targets)	" I can ---- "	Instructional Strategies
	I can describe the 3 stages of cellular respiration and the reactants and products of each	guided notes, group activity
	I can write the chemical equation for cellular respiration	guided notes, equation flashcards game
	I can explain the difference between RNA and DNA	guided notes
	I can describe the steps of DNA replication.	guided notes

Key Vocabulary

Replication	Mutation				
Transcription					
Translation					
Metabolism					
Catabolism					
Anabolism					

Instructor: Mr. Maksimchuk	Course/Grade Level: Anatomy A	Week: 9
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Unit 4: Tissues	Evidence of Learning/Assessments Weekly Socratic Quiz, Unit Test
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Standards (Learning Targets)	" I can ---- "	Instructional Strategies
	I can describe the purpose of the integumentary system.	guided notes
	I can explain the main function of the skin.	guided notes
	I can describe the shape and layering of different epithelial tissue	guided notes, tissue chart
	I can identify different types of epithelial tissue based on pictures	Flashcards, lab

Key Vocabulary

Integumentary System	Adipose				
Epithelium	Elastic				
Squamous	Reticular				
Cuboidal	Collagenous				
Columnar					
Connective Tissue					

Instructor: Mr. Maksimchuk	Course/Grade Level: Anatomy A	Week: 10
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Unit 4: Tissues	Evidence of Learning/Assessments Weekly Socratic Quiz, Unit Test
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Standards (Learning Targets)	" I can ---- "	Instructional Strategies
	I can give an example of where each type of epithelial tissue is found in the body	Guided notes, webquest,
	I can explain the general function of connective tissue	Guided notes
	I can list the 3 main types of connective tissue	Guided notes, keynote presentation
	I can define and explain the make-up of the extracellular matrix	Guided notes
	I can identify the types of supporting connective tissue	Guided notes, flash cards

Key Vocabulary

Blood	Voluntary	Involuntary	Elastic fibers		
Nymph	Intercalated discs	Extracellular matrix	Fibroblast		
Cartilage	Striated	Ground substance	Plasma		
Bone	Neuroglial	Tendon			
Skeletal	Neurons	Ligament			
Smooth	Cardiac	Macrophages			

Instructor: Mr. Maksimchuk	Course/Grade Level: Anatomy A	Week: 11
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Unit 4: Tissues	Evidence of Learning/Assessments Weekly Socratic Quiz, Unit Test
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Standards (Learning Targets)	" I can ---- "	Instructional Strategies
	I can identify the types of fluid connective tissue	Guided notes
	I can define and identify the 3 types of muscle tissue	Guided notes, flash cards, microscope slides
	I can describe where most nervous tissue is found	Guided notes
	I can describe the two main processes involved in tissue repair	Guided notes, diagram

Key Vocabulary

Blood	Voluntary	Involuntary	Elastic fibers		
Nymph	Intercalated discs	Extracellular matrix	Fibroblast		
Cartilage	Striated	Ground substance	Plasma		
Bone	Neuroglial	Tendon			
Skeletal	Neurons	Ligament			
Smooth	Cardiac	Macrophages			

Instructor: Mr. Maksimchuk	Course/Grade Level: Anatomy A	Week: 12
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Unit 5: Integumentary System	Evidence of Learning/Assessments Weekly Socratic Quiz, Unit Test
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Standards (Learning Targets)	" I can ---- "	Instructional Strategies
	I can describe the purpose and main function of the integumentary system.	Guided notes
	I can differentiate between the epidermis, dermis and subcutaneous layer	Guided notes, diagram
	I can order the layers of the epidermis	Guided notes, word reminders
	I can name the four parts of the integumentary system	Guided notes
	I can label the major structures of the integumentary system	Guided notes, skin labeling diagram

Key Vocabulary

Integumentary	Carotene			
Cutaneous membrane	Melanin			
Epidermis	Dermal papilla			
Dermis	Subcutaneous layer			
Avascular				
Keratinized				

Instructor: Mr. Maksimchuk	Course/Grade Level: Anatomy A	Week: 13
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Unit 5: Integumentary System	Evidence of Learning/Assessments Weekly Socratic Quiz, Unit Test
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Standards (Learning Targets)	" I can ---- "	Instructional Strategies
	I can explain why our body needs to sweat	Guided notes, relate to ourselves
	I can describe the difference between melanocytes and keratin	Guided notes
	I can identify the major structures of hair	Guided notes, diagram labeling
	I can describe the difference between the three levels of burns	Guided notes, flashcards
	I can differentiate between the two main glands in the dermis and label them on a picture	Guided notes, diagram labeling

Key Vocabulary

Hair follicles	Eccrine glands				
Keratin	Apocrine glands				
Sebaceous gland	Hypothalamus				
Sebum	1 st degree burn				
Arrector pili	2 nd degree burn				
lunula	3 rd degree burn				

Instructor: Mr. Maksimchuk	Course/Grade Level: Anatomy A	Week: 14
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Unit 6: Skeletal System	Evidence of Learning/Assessments Weekly Socratic Quiz, Unit Test
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Standards (Learning Targets)	" I can ---- "	Instructional Strategies
	I can list the 4 classifications of bones and give an example of each	Guided notes
	I can identify parts of a long bone	Guided notes, diagram labeling/coloring
	I can label the microscopic structures of bone	Guided notes, diagram labeling/coloring
	I can tell the difference between an intramembraneous bone and an endochondral bone	Guided notes
	I can describe the process of bone formation	Guided notes
	I can explain the difference between osteoclasts and osteoblasts	Guided notes
	I can list and describe the functions of bones	Guided notes

Key Vocabulary

Long bone	Articular cartilage	osteocytes	Ossification		
Short bone	periosteum	Canaliculi	osteoblasts		
Flat bone	Compact bone	Osteons	osteoclasts		
Irregular bone	Spongy bone	Lamellae			
epiphyses	Medullary cavity	Intramembraneous bone formation			
diaphysis	endosteum	Endochondrial bone formation			

Instructor: Mr. Maksimchuk	Course/Grade Level: Anatomy A	Week: 15
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Unit 6: Skeletal System	Evidence of Learning/Assessments Weekly Socratic Quiz, Unit Test
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Standards (Learning Targets)	" I can ---- "	Instructional Strategies
	I can classify joints according to structure and movement	Guided notes, examples/pictures/skeleton
	I can explain where blood cells are formed	Guided notes
	I can identify different types of bone fractures	Guided notes, examples/pictures
	I can describe common problems found in the skeletal system	Guided notes, video
	I can identify the main bones of the human body	Guided notes, flashcards

Key Vocabulary

Red bone marrow	Synovial fluid	Pivot joint	Rheumatoid arthritis	Sternum	Tarsals
Yellow bone marrow	Joint capsule	Saddle joint	Osteoarthritis	Femur	Metacarpals
Immovable joint	Ball and socket joint	Simple fracture	Clavicle	Tibia	Carpals
Semi-movable joint	Condylloid joint	Compound fracture	Humerus	Fibula	Phalanges
Freely movable joint	Gliding joint	Greenstick fracture	Radius	Ribs	Scapula
Synovial joint	Hinge joint	Osteoporosis	ulna	metatarsals	Frontal
Temporal	Mandible	Maxilla	Pelvis		

Instructor: Mr. Maksimchuk	Course/Grade Level: Anatomy A	Week: 16
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Unit 7: Muscular System	Evidence of Learning/Assessments Weekly Socratic Quiz, Unit Test
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Standards (Learning Targets)	" I can ---- "	Instructional Strategies
	I can describe the basic parts of a muscle	Guided notes, diagram labeling/coloring
	I can name the main functions of the muscular system	Guided notes
	I can relate the muscular system to the skeletal system	Guided notes
	I can explain the process in which muscle move	Guided notes
	I can label a picture of a muscle cell	Guided notes, diagram labeling

Key Vocabulary

Muscle fibers	Sarcolemma	z-line			
Uninucleated	Endomysium	I-band			
Striated	Epimysium	A-band			
Fascicle	Actin	H-zone			
Perimysium	Myosin	M-line			
myofibrils	sarcomere	crossbridge			

Instructor: Mr. Maksimchuk	Course/Grade Level: Anatomy A	Week: 17
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Unit 7: Muscular System	Evidence of Learning/Assessments Weekly Socratic Quiz, Unit Test
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Standards (Learning Targets)	" I can ---- "	Instructional Strategies
	I can name the different types of muscle tissue and what they do.	Guided notes, keynote presentation
	I can explain the difference between contraction and relaxation	Guided notes, video
	I can explain the contraction mechanism.	Guided notes, video
	I can identify the different filaments in a skeletal muscle	Guided notes, diagram labeling
	I can explain the function of a tendon	Guided notes, pictures
	I can identify the main muscles of the human body	Guided notes, flashcards

Key Vocabulary

Smooth muscle	Sarcoplasmic reticulum	Synergist	Tibialis anterior	Sartorius	
Skeletal muscle	Acetylcholinesterase	Temporalis	Gluteus maximus		
Cardiac muscle	Tendons	Biceps femoris	Gastrocnemius		
Neuromuscular junction	Insertion	Triceps brachii	Biceps brachii		
Synaptic cleft	Origin	Masseter	Deltoid		
acetylcholine	antagonist	frontalis	Rectus abdominus		

Instructor: Mr. Maksimchuk	Course/Grade Level: Anatomy A	Week: 18
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Final Exam & Review	Evidence of Learning/Assessments Final Exams
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Standards (Learning Targets)	" I can ---- "	Instructional Strategies

Key Vocabulary
