MedTable AR Curriculum Educator Guide: HIGH SCHOOL

Revolutionizing Anatomy Education with Augmented Reality

This concise curriculum integration guide helps educators embed MedTableAR into classroom curriculum. Fill in the placeholders for each lesson and adapt suggestions to appropriate grade level and school context. Using this guide, educators will be fully equipped to integrate MedTable AR technology into their classroom, boosting student engagement and learning outcomes.

Table of Contents

MedTable AR Body System Exploration: HIGH SCHOOL

Curriculum Integration Plan

Throughout each lesson, emphasize that students will:

- **Collaborate effectively** in pairs to complete AR/VR exploration tasks and communicate their findings clearly.
- **Demonstrate understanding** by completing quizzes and/or the Student Handout together as a learning pod.
- **Discuss** observations, share insights, and help each other navigate human body systems.

Lesson Objective:	**Essential Questions:**
By the end of this lesson, students will be able to: ● Identify and describe major human body systems and their key structures. ● Locate body structures accurately within the AR/VR device. ● Collaborate effectively in pairs to complete tasks and communicate findings clearly. ● Demonstrate understanding by completing the Scavenger Hunt with their team and Student Note Guide with their assigned partner.	● What are the major human body systems and what roles do they play? ● How do different body systems work together to maintain health and function? ● How can effective communication and teamwork help us learn and solve problems?
Standard to be addressed: ● Human Body Systems (HS-LS1-2) Performance Expectation: Develop and use a model to illustrate the function of a system in the human body. ● Human Body Systems (MS-LS1-2) Performance Expectation: Develop and use a model to describe the function of a system in the human body.	**Assessment:** ● Completion and accuracy of the Student Note Guide. ● Completion and accuracy of the Scavenger Hunt ● Participation in group discussion and reflection. ● Observation of teamwork and communication skills during activities.

MedTable AR Body System Exploration: HIGH SCHOOL

Materials (*optional)

- 3 Tablets with MedTable AR app
- 1 MedTable AR Team Guide
- *3 Student Note Guides (one per student pair)
- *Clipboards
- *Pens or pencils

Lesson Activities

1. Introduction (5 minutes)

- Briefly review the major human body systems (circulatory, respiratory, digestive, nervous, muscular, skeletal).
- Explain the use of MedTable AR tablets to explore these systems interactively.
- Go over the Student Note Guide and Scavenger Hunt.
- Emphasize teamwork and communication expectations.

2. Group Exploration (25 minutes)

- Each pair uses their tablet to navigate the Human Body Map.
- Pairs discuss findings and help each other understand the systems.
- Record structures and functions in the Student Note Guide.
- Teams complete the associated quiz by locating all structures.

3. Group Sharing and Reflection (10 minutes)

- Each member of the team will share at least one interesting fact and one challenge they faced.
- Discuss how communication helped their teamwork.
- Review any questions of the MedTable AR experience.

4. Wrap-Up (5 minutes)

- Recap key points about body systems and teamwork.
- Collect Student Note Guides for review. (*optional)
- Encourage students to think about how body systems interact in daily life.

MedTable AR Body System Exploration: HIGH SCHOOL

Grade Level:	**High School**	**School Name:**	
Subject:	**Cardiovascular System**	**Educator(s):**	
Duration:	**35 minutes**	**Lesson Date:**	

Lesson Objective: (What do you want students to learn?)

- Identify and describe the structures of the cardiovascular system.
- Understand the role and function of the cardiovascular system in the human body.
- Demonstrate how to navigate and utilize the MedTable AR anatomy table effectively.

Standard to be addressed: (can be changed to reflect the standards of the course)

- **Structure and Function (HS-LS1-3)** Performance Expectation: Develop and use a model to illustrate the hierarchical organization of interacting systems that provide specific functions within multicellular organisms.
- **Human Body Systems (HS-LS1-2)** Performance Expectation: Develop and use a model to illustrate the function of a system in the human body.

Essential Questions:

- What are the main structures of the cardiovascular system?
- What are the functions of the heart, blood vessels, and blood?
- How does the cardiovascular system interact with other body systems?

Key Terms:

Aorta: The largest artery in the body, it carries oxygenated blood from the left ventricle of the heart to the rest of the body.
Arteries: Blood vessels that carry oxygen-rich blood away from the heart to the body.
Basilic (and Cephalic Veins): Located in the arm, these commonly used for blood draws and intravenous access.
Capillaries: Small blood vessels that connect arteries and veins, facilitating the exchange of oxygen, carbon dioxide, nutrients, and waste between blood and tissues.
Carotid Arteries: These supply blood to the head and neck, with the common carotid artery branching into the internal and external carotid arteries.
Coronary Arteries: These supply blood to the heart muscle itself, branching off from the aorta.
Femoral Vein: This vein drains deoxygenated blood from the thigh and leg back to the heart.
Heart: A muscular organ that pumps blood throughout the body, consisting of four chambers (two atria and two ventricles).
Inferior Vena Cava: This vein carries deoxygenated blood from the lower body to the right atrium of the heart.

MedTable AR Body System Exploration: HIGH SCHOOL

Platelets: Small cell fragments in the blood that play a key role in blood clotting.
Plasma: The liquid component of blood that carries cells, nutrients, hormones, and waste products.
Pulmonary Arteries: These carry deoxygenated blood from the right ventricle of the heart to the lungs for oxygenation.
Red Blood Cells (Erythrocytes): Cells that transport oxygen from the lungs to the body and carbon dioxide from the body back to the lungs.
Superior Vena Cava: This large vein carries deoxygenated blood from the upper body to the right atrium of the heart.
Veins: Blood vessels that carry deoxygenated blood back to the heart.
White Blood Cells (Leukocytes): Cells that are part of the immune system and help defend the body against infection.

Opening:

Today, you will engage in an innovative exploration of the cardiovascular system, a vital network that ensures the delivery of oxygen and nutrients to tissues while removing waste products. Today, we will explore the key structures of this system, how they function in harmony, and their importance to overall health. Additionally, we will highlight why understanding the cardiovascular system is crucial for maintaining overall health and wellness.

Discussion Prompts:

- How did using MedTable AR change your understanding of the cardiovascular system?
- What was the most interesting fact you learned about the cardiovascular system?
- How does the cardiovascular system work with other body systems?

Q&A:

1. **Q**: What is the primary function of the heart?
   A: The primary function of the heart is to pump blood throughout the body, supplying oxygen and nutrients while removing waste products.
2. **Q**: How many chambers does the heart have, and what are they called?
   A: The heart has four chambers: two atria (upper chambers) and two ventricles (lower chambers).
3. **Q**: What is the difference between arteries and veins?
   A: Arteries carry oxygen-rich blood away from the heart, while veins carry deoxygenated blood back to the heart.
4. **Q**: What role do capillaries play in the cardiovascular system?
   A: Capillaries facilitate the exchange of oxygen, carbon dioxide, nutrients, and waste between blood and body tissues.
5. **Q**: What are red blood cells, and what is their function?
   A: Red blood cells are responsible for transporting oxygen from the lungs to the body's tissues and carrying carbon dioxide back to the lungs.
6. **Q**: Why are platelets important for the cardiovascular system?
   A: Platelets are crucial for blood clotting, helping to prevent excessive bleeding when injuries occur.
7. **Q**: How does the cardiovascular system respond to exercise?
   A: During exercise, the heart rate increases, and blood vessels dilate to deliver more oxygen and nutrients to active muscles.

8. **Q**: What is plasma, and what does it contain?
   A: Plasma is the liquid component of blood, containing water, electrolytes, proteins, hormones, and waste products.
9. **Q**: How do white blood cells contribute to cardiovascular health?
   A: White blood cells help defend the body against infections and diseases, thus maintaining overall health and function of the cardiovascular system.
10. **Q**: What lifestyle choices can negatively impact cardiovascular health?
    A: Poor diet, lack of exercise, smoking, and excessive alcohol consumption can negatively impact cardiovascular health.

Career Exploration:

- **Cardiologist:** A physician specializing in diagnosing and treating heart and blood vessel conditions.
- **Cardiovascular Technician:** A healthcare professional who assists in diagnosing and treating cardiovascular diseases using diagnostic equipment.
- **Nurse Practitioner:** A nurse with advanced training who can provide care for patients with cardiovascular issues.
- **Exercise Physiologist:** A professional who develops fitness programs to improve cardiovascular health and overall fitness.

Closure:

We've explored the structures and functions of the cardiovascular system. The cardiovascular system is integral to our health, ensuring that our bodies receive the necessary nutrients and oxygen while removing waste. Understanding its structures and functions helps us appreciate the importance of maintaining cardiovascular health through lifestyle choices and regular medical check-ups.

Notes:

- Have students complete the associated quiz.
- Have students explore the Body Organ: Heart

MedTable AR Body System Exploration: HIGH SCHOOL

Grade Level:	**High School**	**School Name:**	
Subject:	**Digestive System**	**Educator(s):**	
Duration:	**35min**	**Lesson Date:**	

Lesson Objective: (What do you want students to learn?)

- Identify and describe the structures of the digestive system.
- Understand the role and function of the digestive system in the human body.
- Demonstrate how to navigate and utilize the MedTable AR anatomy table effectively.

Standard to be addressed: (can be changed to reflect the standards of the course)

1. **Structure and Function (HS-LS1-3)** Performance Expectation: Develop and use a model to illustrate the hierarchical organization of interacting systems that provide specific functions within multicellular organisms.
2. **Human Body Systems (HS-LS1-2)** Performance Expectation: Develop and use a model to illustrate the function of a system in the human body.

Essential Questions:

- What are the main functions of the digestive system?
- How does the digestive system work to break down food?
- How do various organs contribute to the digestive process?
- How can lifestyle choices impact digestive health?

Key Terms:

Absorption: The process by which nutrients from food are taken into the bloodstream.

Alimentary Canal: The continuous tube that runs from the mouth to the anus, through which food passes during digestion.

Bolus: A soft mass of chewed food that is formed in the mouth and swallowed.

Chyme: The semi-liquid mixture of partially digested food and digestive juices found in the stomach and small intestine.

Digestive Enzymes: Proteins that speed up the breakdown of food into smaller molecules.

Digestion: The process of breaking down food into smaller, absorbable components.

Enzyme: A biological catalyst that speeds up chemical reactions, including digestion.

Esophagus: A muscular tube that connects the throat to the stomach; it transports food.

Gallbladder: A small organ that stores and concentrates bile produced by the liver.

Intestines: The long, tube-like organs where digestion and nutrient absorption occur (includes small and large intestines).

MedTable AR Body System Exploration: HIGH SCHOOL

Liver: A vital organ that produces bile for digestion and processes nutrients.

Pancreas: An organ that produces digestive enzymes and hormones like insulin.

Peristalsis: The wave-like muscle contractions that move food through the digestive tract.

Rectum: The final section of the large intestine, where waste is stored before elimination.

Salivary Glands: Glands in the mouth that produce saliva, aiding in digestion and swallowing.

Sphincter: A circular muscle that controls the passage of substances through openings in the digestive system (e.g., lower esophageal sphincter).

Stomach: A hollow organ that holds food while it is being mixed with stomach enzymes and acids.

Villi: Tiny, finger-like projections in the intestines that increase surface area for absorption.

Opening:

Today, you will engage in an innovative exploration of the digestive system through the use of MedTable AR. This immersive experience will allow you to visualize and interact with the various structures of the human digestive system. As you proceed, please focus on the anatomical structures and the significance of their function in our overall health by breaking down food, absorbing nutrients, and eliminating waste.

Discussion Prompts:

- How does the use of MedTable AR change your perception of learning anatomy?
- How does the digestive system work with other body systems?
- Discuss how different careers in health and medicine might utilize knowledge of the digestive system.

Q&A:

1. **Q:** What is the main function of the digestive system?
   A: To provide structure, support, and protection for the body.
2. **Q:** What is the primary function of the stomach?
   A: To mix food with gastric juices to begin the digestion of proteins.
3. **Q:** What role do the intestines play in digestion?
   A: The small intestine absorbs most nutrients, while the large intestine absorbs water and forms waste.
4. **Q:** How does bile aid in digestion?
   A: Bile emulsifies fats, making them easier to digest and absorb.
5. **Q:** What are enzymes, and why are they important in digestion?
   A: Enzymes are proteins that facilitate the breakdown of food into absorbable molecules.
6. **Q:** What is the function of the pancreas in digestion?
   A: The pancreas produces digestive enzymes and regulates blood sugar with insulin.
7. **Q:** Why is nutrient absorption crucial for the body?
   A: It provides the body with essential nutrients needed for energy, growth, and repair.

MedTable AR Body System Exploration: HIGH SCHOOL

8. **Q:** What is the significance of villi in the intestines?
   A: Villi increases the surface area for nutrient absorption in the small intestine.
9. **Q:** What is the esophagus's role in the digestive system?
   A: The esophagus transports food from the mouth to the stomach.
10. **Q:** How does the liver contribute to digestion?
    A: The liver produces bile, which is stored in the gallbladder and released into the small intestine.

Career Exploration:

- **Nutritionist:** Professionals who advise individuals on dietary practices to promote health and wellness.
- **Gastroenterologist:** Medical doctors specializing in the diagnosis and treatment of digestive system disorders.
- **Dietitian:** Registered health professionals who specialize in food and nutrition.

Closure:

Today you should have gained valuable insights into the digestive system. By studying how our bodies process food, we can make informed decisions about health and inspire future innovations in digestive health. Take the next few moments to reflect on the key concepts we discussed and consider how this knowledge can be applied in fields such as health, fitness, and medicine.

NOTES:

- Have students complete the associated quiz.

MedTable AR Body System Exploration: HIGH SCHOOL

Grade Level:	**High School**	**School Name:**	
Subject:	**Integumentary System**	**Educator(s):**	
Duration:	**35 minutes**	**Lesson Date:**	

Lesson Objective: (What do you want students to learn?)

- Identify and describe the structures of the integumentary system.
- Understand the role and function of the integumentary system in the human body.
- Demonstrate how to navigate and utilize the MedTable AR anatomy table effectively.

Standard to be addressed:(can be changed to reflect the standards of the course)

- **Structure and Function (HS-LS1-3)** Performance Expectation: Develop and use a model to illustrate the hierarchical organization of interacting systems that provide specific functions within multicellular organisms.
- **Human Body Systems (HS-LS1-2)** Performance Expectation: Develop and use a model to illustrate the function of a system in the human body.

Essential Questions:

- What are the main functions of the integumentary system?
- What roles do hair and nails play in the integumentary system?
- How does the integumentary system protect the body from external threats?
- Why is understanding the integumentary system important for overall health and wellness?

Key Terms:

Dermis - The inner layer of skin that contains blood vessels, nerves, and connective tissue.
Epidermis - The outermost layer of skin that provides a protective barrier.
Follicle - A small cavity in which a hair develops.
Hair - A filamentous structure that grows from follicles in the skin, providing protection and insulation.
Melanin - A pigment responsible for the color of skin and hair, which helps protect against UV radiation.
Nails - Hard protective coverings on the tips of fingers and toes.
Sebum - An oily substance produced by sebaceous glands that moisturizes the skin and hair.
Skin - The largest organ of the body, serving as a barrier and protector for underlying tissues.
Sweat Gland - Glands that produce sweat to help regulate body temperature.
Tissue - A group of cells that work together to perform a specific function; in the integumentary system, this includes epithelial and connective tissues.
Hypodermis (Subcutaneous Layer) - The layer of fat and connective tissue beneath the dermis that insulates the body and absorbs shock.

MedTable AR Body System Exploration: HIGH SCHOOL

Keratin - A protein that forms the structure of hair, nails, and the outer layer of skin.
Pore - A tiny opening in the skin through which sweat and sebum are released.

Opening:

Today, you will engage in an innovative exploration of the integumentary system, which includes our skin, hair, and nails, through the use of MedTable AR. We'll discuss its main functions, the roles that hair and nails play, and how this system protects our bodies from external threats. Additionally, we will highlight why understanding the integumentary system is crucial for maintaining overall health and wellness.

Discussion Prompts:

1. How did using MedTable AR change your understanding of the integumentary system?
2. What was the most interesting fact you learned about the skin?
3. How does the integumentary system work with other body systems?

Q&A:

1. **Q:** What are the two main layers of the skin?
   A: The epidermis and the dermis.
2. **Q:** What is the primary function of the epidermis?
   A: The epidermis acts as a protective barrier against environmental hazards.
3. **Q:** What is melanin, and what role does it play in the skin?
   A: Melanin is a pigment that gives skin its color and protects against UV radiation.
4. **Q:** What is the function of sweat glands?
   A: Sweat glands help regulate body temperature through perspiration.
5. **Q:** How do hair follicles contribute to the integumentary system?
   A: Hair follicles produce hair, which provides insulation and protection.
6. **Q:** What is the purpose of sebum in the skin?
   A: Sebum is an oily substance that moisturizes and protects the skin and hair.
7. **Q:** How does the integumentary system help in sensation?
   A: The skin contains sensory receptors that detect touch, temperature, and pain.
8. **Q:** What role do nails play in the integumentary system?
   A: Nails protect the tips of fingers and toes and enhance grip.
9. **Q:** How does the integumentary system contribute to homeostasis?
   A: It helps regulate body temperature and protects internal organs.
10. **Q:** Why is it important to care for your skin?
    A: Proper skin care helps prevent infections, skin disorders, and maintains overall health.

MedTable AR Body System Exploration: HIGH SCHOOL

Career Exploration:	**Closure:**
● **Dermatologist:** Discuss the role of dermatologists in diagnosing and treating skin conditions. ● **Cosmetic Scientist:** Explore how cosmetic scientists develop products for skin care and beauty. ● **Medical Esthetician:** Explain the role of medical estheticians in skincare treatments and procedures. ● **Health Educator:** Consider the role of health educators in teaching about skin health and hygiene.	*We've explored the structures and functions of the integumentary system, the significance of hair and nails, and how this system acts as a barrier against external threats. Understanding the integumentary system is vital for recognizing how to care for our skin and overall health.*
NOTES: ● Have students complete the associated quiz. ● Have students explore the Body Organ: Integumentary	

MedTable AR Body System Exploration: HIGH SCHOOL

Grade Level:	**High School**	**School Name:**	
Subject:	**Lymphatic System**	**Educator(s):**	
Duration:	**35 minutes**	**Lesson Date:**	

Lesson Objective: (What do you want students to learn?)

- Identify and describe the structures of the lymphatic system.
- Understand the role and function of the lymphatic system in the human body.
- Demonstrate how to navigate and utilize the MedTable AR anatomy table effectively.

Standard to be addressed: (can be changed to reflect the standards of the course)

- **Structure and Function (HS-LS1-3)** Performance Expectation: Develop and use a model to illustrate the hierarchical organization of interacting systems that provide specific functions within multicellular organisms.
- **Human Body Systems (HS-LS1-2)** Performance Expectation: Develop and use a model to illustrate the function of a system in the human body.

Essential Questions:

- What are the main structures of the lymphatic system?
- What are the main functions of the lymphatic system?
- How does the lymphatic system interact with other body systems?

Key Terms:

Cisterna Chyli: A dilated sac at the lower end of the thoracic duct that collects lymph from the lower body.
Lymph: A clear fluid that circulates through the lymphatic system, containing white blood cells and waste products.
Lymphatic Ducts: Major vessels that drain lymph from the lymphatic vessels into the bloodstream (e.g., right lymphatic duct and thoracic duct).
Lymph Nodes: Small, bean-shaped structures that filter lymph and contain immune cells that help fight infection.
Lymphatic Vessels: Thin-walled vessels that transport lymph throughout the body.
Right Lymphatic Duct: The vessel that drains lymph from the right upper body into the right subclavian vein.
Spleen: An organ that filters blood, recycles iron, and helps produce lymphocytes.
Thymus: A gland where T lymphocytes mature, playing a crucial role in the immune response.
Tonsils: Lymphoid tissues located in the throat that help protect against pathogens entering through the mouth and nose.

MedTable AR Body System Exploration: HIGH SCHOOL

Opening:

Today, you will engage in an innovative exploration of the lymphatic system. The lymphatic system helps maintain fluid balance, protects against infections, absorbs fats from digestion, transports lymph, and produces immune cells to defend the body. Today, we will explore the key structures of this system, their functions, and their importance to overall health.

Discussion Prompts:

3. How did using MedTable AR change your understanding of the lymphatic system?
4. What was the most interesting fact you learned about the lymphatic system?
5. How does the lymphatic system work with other body systems?

Q&A:

1. **Q**: What is lymph?
   A: Lymph is a clear fluid that circulates through the lymphatic system, containing white blood cells and waste products.
2. **Q**: What are lymph nodes?
   A: Lymph nodes are small, bean-shaped structures that filter lymph and contain immune cells that help fight infections.
3. **Q**: What do lymphatic vessels do?
   A: Lymphatic vessels are thin tubes that transport lymph throughout the body.
4. **Q**: What is the role of the spleen?
   A: The spleen filters blood, recycles iron, and helps produce lymphocytes, which are important for the immune system.
5. **Q**: Where is the thymus located and what does it do?
   A: The thymus is located in the chest, and it is where T lymphocytes mature and become ready to fight infections.
6. **Q**: What are tonsils?
   A: Tonsils are lymphoid tissues located in the throat that help protect against germs entering through the mouth and nose.
7. **Q**: What is the function of the right lymphatic duct?
   A: The right lymphatic duct drains lymph from the right upper part of the body into the bloodstream.
8. **Q**: What is the cisterna chyli?
   A: The cisterna chyli is a pouch at the lower end of the thoracic duct that collects lymph from the lower body.
9. **Q**: What is mucosa-associated lymphoid tissue (MALT)?
   A: MALT is a type of lymphoid tissue found in mucosal areas, like the gut and respiratory tract, that helps protect against pathogens.
10. **Q**: How does the lymphatic system work with other systems in the body?
    A: The lymphatic system works closely with the circulatory system to maintain fluid balance and with the immune system to protect against diseases.

MedTable AR Body System Exploration: HIGH SCHOOL

Career Exploration:	**Closure:**
● **Medical Doctor (MD):** Specializing in immunology or oncology to treat conditions related to the lymphatic system. ● **Biomedical Researcher:** Conducting studies to understand the lymphatic system and develop new treatments for related diseases. ● **Clinical Laboratory Technologist:** Analyzing samples to help diagnose diseases linked to the lymphatic system. ● **Health Educator:** Teaching communities about the lymphatic system and ways to maintain a healthy immune system.	*We've explored the structures and functions of the lymphatic system. The lymphatic system is integral to our health, ensuring that our bodies maintain fluid balance, are protected against infections, absorb fats from digestion, transport lymph, and produce immune cells to defend the body. Understanding its structures and functions helps us appreciate the importance of the lymphatic system.*
NOTES: ● Have students complete the associated quiz.	

MedTable AR Body System Exploration: HIGH SCHOOL

Grade Level:	**High School**	**School Name:**	
Subject:	**Muscular System**	**Educator(s):**	
Duration:	**35 minutes**	**Lesson Date:**	

Lesson Objective: (What do you want students to learn?)

- Identify and describe the structures of the muscular system.
- Understand the role and function of the muscular system in the human body.
- Demonstrate how to navigate and utilize the MedTable AR anatomy table effectively.

Standard to be addressed: (can be changed to reflect the standards of the course)

- **Structure and Function (HS-LS1-3)** Performance Expectation: Develop and use a model to illustrate the hierarchical organization of interacting systems that provide specific functions within multicellular organisms. This includes the muscular system as a vital component of the human body.
- **Human Body Systems (HS-LS1-2)** Performance Expectation: Develop and use a model to illustrate the function of a system in the human body, focusing on the muscular system's role in movement, stability, and interaction with other body systems.

Essential Questions:

- What are the main functions of the muscular system?
- What are the differences between skeletal, smooth, and cardiac muscles?
- How do muscles work together to produce movement?
- How does the muscular system work with other body systems?

Key Terms:

Antagonist Muscle - A muscle that opposes the action of another muscle.
Cardiac Muscle - The type of muscle found only in the heart, responsible for pumping blood.
Contract - The process by which a muscle shortens and generates force.
Flexor - A muscle that decreases the angle between two bones at a joint.
Involuntary Muscle - Muscle that operates without conscious control, such as cardiac and smooth muscles.
Muscle Fiber - The individual cells that make up a muscle; can be classified as slow-twitch or fast-twitch fibers.
Muscle Group - A collection of muscles that work together to perform a specific movement.
Skeletal Muscle - The type of muscle attached to bones that enables voluntary movement.

MedTable AR Body System Exploration: HIGH SCHOOL

Smooth Muscle - Involuntary muscle found in the walls of internal organs, responsible for movements such as digestion and blood vessel constriction.
Tendon - A strong connective tissue that attaches muscles to bones.
Voluntary Muscle - Muscle that can be consciously controlled, such as skeletal muscle.
Muscle Contraction - The process by which muscle fibers generate tension and shorten.

Opening:

Today, you will engage in an innovative exploration of the muscular system through the use of MedTableAR. This immersive experience will allow you to visualize and interact with the various structures of the human body. Our objectives for this lesson are to identify and describe the key structures of the muscular system, understand its essential roles—such as enabling movement, maintaining posture, and generating heat—and demonstrate effective navigation and utilization of the MedTableAR anatomy table.

Discussion Prompts:

- How did using MedTable AR change your understanding of the muscular system?
- Discuss how different careers in health and medicine might utilize knowledge of the muscular system.

Q&A:

1. **Q:** What are the three types of muscle tissue in the human body?
   A: Skeletal, smooth, and cardiac muscle.
2. **Q:** What is the primary function of skeletal muscles?
   A: Skeletal muscles facilitate voluntary movements by contracting and relaxing.
3. **Q:** What is a tendon?
   A: A tendon is a connective tissue that attaches muscles to bones.
4. **Q:** What is the difference between voluntary and involuntary muscles?
   A: Voluntary muscles are under conscious control, while involuntary muscles operate without conscious control.
5. **Q:** What role do antagonistic muscles play in movement?
   A: Antagonistic muscles work in pairs; when one muscle contracts, the other relaxes to allow smooth movement.
6. **Q:** How do muscle fibers contract?
   A: Muscle fibers contract through a process called the sliding filament theory.
7. **Q:** What is the function of cardiac muscle?
   A: Cardiac muscle makes up the heart and is responsible for pumping blood throughout the body.
8. **Q:** What is a flexor muscle?
   A: A flexor muscle decreases the angle between two bones at a joint.

MedTable AR Body System Exploration: HIGH SCHOOL

9. **Q:** What is the role of smooth muscles?
   A: Smooth muscles control involuntary movements in organs such as the stomach and blood vessels.
10. **Q:** How does exercise affect the muscular system?
    A: Regular exercise increases muscle strength, endurance, and overall function

Career Exploration:

- **Physical Therapist:** Discuss the role of physical therapists in helping patients restore movement through rehabilitation.
- **Exercise Physiologist:** Explore how exercise physiologists design fitness programs that enhance muscle performance.
- **Sports Medicine Physician:** Explain how these doctors treat injuries related to muscles and provide guidance on recovery.
- **Fitness Trainer:** Consider the role of fitness trainers in educating clients about muscle health and exercise techniques.

Closure:

We've explored the structures and functions of the muscular system in detail, including how muscles enable movement and maintain our posture. You've also gained hands-on experience with the MedTable AR anatomy table. Understanding the muscular system is crucial for fields related to health, fitness, and medicine.

NOTES:

- Have students complete the associated quiz.
- Have students explore the Body Organ: Heart

MedTable AR Body System Exploration: HIGH SCHOOL

Grade Level:	**High School**	**School Name:**	
Subject:	**Nervous System**	**Educator(s):**	
Duration:	**35 minutes**	**Lesson Date:**	

Lesson Objective: (What do you want students to learn?)

- Identify and describe the structures of the nervous system.
- Understand the role and function of the nervous system in the human body.
- Demonstrate how to navigate and utilize the MedTable AR anatomy table effectively.

Standard to be addressed: (can be changed to reflect the standards of the course)

- **Structure and Function (HS-LS1-3)** Performance Expectation: Develop and use a model to illustrate the hierarchical organization of interacting systems that provide specific functions within multicellular organisms.
- **Human Body Systems (HS-LS1-2)** Performance Expectation: Develop and use a model to illustrate the function of a system in the human body.

Essential Questions:

- What are the main structures of the nervous system?
- What are the functions of the brain and spinal cord?
- How does the nervous system interact with other body systems?

Key Terms:

Autonomic Nervous System: Regulates involuntary bodily functions.
Axon: The part of a neuron that transmits signals away from the cell body.
Brain: The control center of the body, responsible for processing information.
Brainstem: The part of the brain that controls basic life functions.
Cerebellum: Coordinates movement and balance.
Cerebrum: The largest part of the brain, involved in higher brain functions.
Dendrites: The branches of a neuron that receive signals from other neurons.
Glial Cells: Supportive cells that nourish and protect neurons.
Myelin Sheath: Insulates the axon and speeds up signal transmission.
Peripheral Nervous System (PNS): Connects the CNS to the rest of the body.
Reflex: An automatic response to a stimulus.

MedTable AR Body System Exploration: HIGH SCHOOL

Somatic Nervous System: Controls voluntary movements of skeletal muscles.
Spinal Cord: Transmits signals between the brain and the body.
Synapse: The junction between neurons where communication occurs.

Opening:

Today, you will engage in an innovative exploration of the nervous system, a complex network that controls and coordinates actions and reactions in the body. Today, we will explore the key structures of this system, how they function in harmony, and their importance to overall health. Additionally, we will highlight why understanding the nervous system is crucial for maintaining overall health and wellness.

Discussion Prompts:

6. How did using MedTable AR change your understanding of the nervous system?
7. What was the most interesting fact you learned about the nervous system?
8. How does the nervous system work with other body systems?

Q&A:

1. **Q**: What is the primary function of the brain?
   A: The brain processes information, controls thoughts and emotions, and coordinates body functions.
2. **Q**: What is the spinal cord, and where is it located?
   A: The spinal cord is a long, tubular structure that runs down the back, encased in the vertebral column, and connects the brain to the rest of the body.
3. **Q**: What role does the spinal cord play in the nervous system?
   A: The spinal cord transmits signals between the brain and the body and processes reflexes.
4. **Q**: What is a neuron, and what are its main parts?
   A: A neuron is a nerve cell that transmits signals. Its main parts include the cell body, dendrites, axon, and myelin sheath.
5. **Q**: What is the function of the myelin sheath?
   A: The myelin sheath insulates the axon and speeds up the transmission of electrical signals along the neuron.
6. **Q**: What are the two main parts of the nervous system?
   A: The two main parts are the Central Nervous System (CNS), which includes the brain and spinal cord, and the Peripheral Nervous System (PNS), which connects the CNS to the rest of the body.
7. **Q**: What is a synapse?
   A: A synapse is the junction between two neurons where neurotransmitters are released to transmit signals.
8. **Q**: What is the function of the brainstem?
   A: The brainstem controls basic life functions such as breathing, heart rate, and blood pressure.
9. **Q**: What is the role of the meninges?
   A: The meninges are protective membranes that surround both the brain and spinal cord, providing support and cushioning.

MedTable AR Body System Exploration: HIGH SCHOOL

10. **Q**: What is the function of cerebrospinal fluid (CSF)?
    A: Cerebrospinal fluid cushions the brain and spinal cord, provides nutrients, and removes waste.

Career Exploration:

- **Neurologist/Neurosurgeon:** Medical doctors specializing in diagnosing and treating nervous system disorders.
- **Neuropsychologist:** Professionals who assess and treat cognitive impairments related to brain function, typically holding a doctoral degree in psychology with specialized training.
- **Therapists (Physical & Occupational):** Healthcare providers who help patients recover mobility and daily living skills after neurological conditions.

Closure:

We've explored the structures and functions of the nervous system. The structures of the nervous system allow the body to process information, respond to stimuli, and maintain homeostasis. Understanding its structures and functions helps us appreciate the importance of maintaining overall health through lifestyle choices and regular medical check-ups.

Notes:

- Have students complete the associated quiz.
- Have students explore the Body Organ: Brain

MedTable AR Body System Exploration: HIGH SCHOOL

Grade Level:	**High School**	**School Name:**	
Subject:	**Respiratory System**	**Educator(s):**	
Duration:	**35 minutes**	**Lesson Date:**	

Lesson Objective: (What do you want students to learn?)

- Identify and describe the structures of the respiratory system.
- Understand the role and function of the respiratory system in the human body.
- Demonstrate how to navigate and utilize the MedTable AR anatomy table effectively.

Standard to be addressed:

- **Structure and Function (HS-LS1-3)** Performance Expectation: Develop and use a model to illustrate the hierarchical organization of interacting systems that provide specific functions within multicellular organisms.
- **Human Body Systems (HS-LS1-2)** Performance Expectation: Develop and use a model to illustrate the function of a system in the human body.

Essential Questions:

- What are the main structures of the respiratory system?
- How do the structures of the respiratory system facilitate gas exchange?
- How does the respiratory system interact with other body systems?

Key Terms:

Alveoli: Tiny air sacs in the lungs where oxygen and carbon dioxide are exchanged.

Bronchi: Two main air passages that branch from the trachea into each lung.

Bronchioles: Smaller branches of bronchi that lead to the alveoli.

Diaphragm: A dome-shaped muscle that separates the chest cavity from the abdomen; crucial for breathing.

Gas Exchange: The process by which oxygen enters the blood and carbon dioxide is removed.

Larynx: The voice box; contains vocal cords and is involved in sound production.

Nasal Cavity: The space behind the nose where air is filtered, warmed, and moistened.

Pharynx: The throat; a passage for air and food.

Trachea: The windpipe; a tube that connects the larynx to the bronchi.

Respiration: The biochemical process in which cells use oxygen to produce energy, involving both external and internal respiration.

MedTable AR Body System Exploration: HIGH SCHOOL

Opening:	Discussion Prompts:
Today, you will engage in an innovative exploration of the respiratory system and processes of inhalation and exhalation, including the role of the diaphragm and intercostal muscles. Additionally, we will highlight why understanding the respiratory system is crucial for maintaining overall health and wellness.	● How did using MedTable AR change your understanding of the respiratory system? ● What was the most interesting fact you learned about the respiratory system? ● How does the respiratory system work with other body systems?

Q&A:

1. **Q**: How does the structure of the alveoli enhance their function in gas exchange?
   A: The alveoli have thin walls and a large surface area, allowing for efficient diffusion of oxygen into the blood and carbon dioxide out of the blood.
2. **Q**: What role do the bronchi play in the respiratory system?
   A: The bronchi serve as the main passageways for air to enter the lungs, branching into smaller bronchioles that lead to alveoli.
3. **Q**: Describe the process of inhalation.
   A: During inhalation, the diaphragm contracts and moves downward, and the intercostal muscles expand the rib cage, decreasing the pressure in the lungs and causing air to flow in.
4. **Q**: What happens during exhalation?
   A: The diaphragm relaxes, and the intercostal muscles contract, reducing the volume of the thoracic cavity and increasing pressure in the lungs, forcing air out.
5. **Q**: How does the respiratory system help regulate blood pH?
   A: The respiratory system controls the levels of carbon dioxide in the blood, which affects acidity; by altering breathing rate, it can help maintain optimal blood pH.
6. **Q**: Explain the difference between external and internal respiration.
   A: External respiration occurs in the lungs (gas exchange between alveoli and blood), while internal respiration occurs in tissues (gas exchange between blood and cells).
7. **Q**: What is the significance of surfactant in the lungs?
   A: Surfactant reduces surface tension in the alveoli, preventing their collapse and ensuring efficient gas exchange.
8. **Q**: What physiological changes occur during exercise that affect the respiratory system?
   A: During exercise, the respiratory rate and depth of breathing increase to meet the higher oxygen demands of the body and to expel carbon dioxide more efficiently.

MedTable AR Body System Exploration: HIGH SCHOOL

9. **Q**: Why is it important for respiratory health to avoid pollutants and irritants?
   A: Pollutants and irritants can damage respiratory tissues, impair cilia function, and lead to chronic diseases, negatively affecting gas exchange efficiency.
10. **Q:** What field of medicine focuses on lung health and the treatment of diseases like asthma or pneumonia?
    A: Pulmonology. Pulmonologists specialize in lung health and treat diseases like asthma or pneumonia.

Career Exploration:

- **Respiratory Therapists**: They help patients who have trouble breathing by using special equipment and treatments to improve lung function.
- **Pulmonologists**: Doctors who specialize in lung health and treat diseases like asthma or pneumonia.
- **Cardiovascular Technicians**: They work with heart and blood vessel health, helping monitor how well oxygen moves through the body.
- **Paramedics and Nurses**: They provide emergency care to support breathing and heart function during accidents or illness.

Closure:

We've explored the structures and functions of the respiratory system. Understanding its structures and functions helps us consider the impact of lifestyle choices (like smoking or exercise) on respiratory function and the importance of taking action to improve their respiratory health.

NOTES:

- Have students complete the associated quiz.
- Have students explore the Body Organ: Lungs

Describe the pathway of air as it enters our body:

Air enters through the nasal cavity → moves to the pharynx → passes through the larynx → goes down the trachea → splits into the bronchi → travels through bronchioles → reaches the alveoli.

MedTable AR Body System Exploration: HIGH SCHOOL

Grade Level:	**High School**	**School Name:**	
Course:	**Skeletal System**	**Educator(s):**	
Duration:	**35min**	**Lesson Date:**	

Lesson Objective: (What do you want students to learn?)

- Identify and describe the structures of the skeletal system.
- Understand the role and function of the skeletal system in the human body.
- Demonstrate how to navigate and utilize the MedTable AR anatomy table effectively.

Standard to be addressed: (can be changed to reflect the standards of the course)

- **Structure and Function (HS-LS1-3)** Performance Expectation: Develop and use a model to illustrate the hierarchical organization of interacting systems that provide specific functions within multicellular organisms.
- **Human Body Systems (HS-LS1-2)** Performance Expectation: Develop and use a model to illustrate the function of a system in the human body.

Essential Questions:

- What are the main structures of the skeletal system?
- What are the main functions of the skeletal system?
- How does the skeletal system interact with other body systems?

Key Terms:

Carpals: The eight small bones that make up the wrist (proximal and distal rows).

Clavicle: Also known as the collarbone, it connects the arm to the body and helps stabilize the shoulder.

Cranial Bones: Include the frontal, parietal (2), temporal (2), occipital, sphenoid, and ethmoid bones.

Facial Bones: Include the nasal (2), maxilla (2), zygomatic (2), mandible, palatine (2), lacrimal (2), and vomer.

Femur: The longest bone in the body, located in the thigh, extending from the hip to the knee.

Fibula: The smaller bone in the lower leg, located on the outer side of the tibia, providing support and stability to the ankle.

Humerus: The long bone of the upper arm, extending from the shoulder to the elbow.

Metacarpals: The five bones that form the intermediate part of the hand, connecting the carpals to the phalanges (finger bones).

Metatarsals: The five long bones in the foot, connecting the tarsals to the phalanges of the toes.

Patella: Also known as the kneecap, it is a small, flat bone that protects the knee joint.

MedTable AR Body System Exploration: HIGH SCHOOL

Pelvis: The bony structure located at the base of the spine, composed of the ilium, ischium, and pubis, supporting the weight of the upper body and protecting pelvic organs.
Phalanges: The bones of the fingers and toes. Each finger has three phalanges (proximal, middle, distal) except for the thumb, which has two.
Phalanges (Foot): The bones of the toes, similar to those in the fingers.
Radius: One of the two long bones in the forearm, located on the thumb side when in the standard anatomical position.
Rib Cage: Composed of 12 pairs of ribs that protect the thoracic cavity and support the upper body. It includes the sternum (breastbone).
Scapula: Also known as the shoulder blade, it connects the humerus (upper arm bone) with the clavicle.**Skull:** The bony structure that forms the head, protecting the brain and supporting the facial structures. It consists of the cranial bones and facial bones.
Tarsals: The seven bones that make up the ankle (including the talus and calcaneus).
Tibia: The larger of the two bones in the lower leg, located on the inner side, commonly referred to as the shinbone.
Ulna: The second long bone in the forearm, located on the opposite side of the radius; it is generally larger at the elbow and smaller at the wrist.
Vertebral Column: Also known as the spine, it is composed of 33 vertebrae divided into regions: cervical (7), thoracic (12), lumbar (5), sacral (5 fused), and coccygeal (4 fused).

Opening:

Today, you will engage in an innovative exploration of the skeletal system through the use of MedTable AR. This immersive experience will allow you to visualize and interact with the various structures of the human skeleton, including bones, joints, and cartilage. As you proceed, please focus on the anatomical structures and their functions, as well as the overall significance of the skeletal system in maintaining bodily health and mobility.

Discussion Prompts:

- How does the use of MedTable AR change your perception of learning anatomy?
- Discuss how different careers in health and medicine might utilize knowledge of the skeletal system.
- How does the skeletal system work with other body systems?

Q&A:

1. **Q:** What is the main function of the skeletal system?
   A: To provide structure, support, and protection for the body.
2. **Q:** What are the two main divisions of the skeletal system?
   A: The axial skeleton and the appendicular skeleton.
3. **Q:** How many vertebrae make up the human vertebral column?
   A: The human vertebral column consists of 33 vertebrae, which are divided into five regions: cervical (7), thoracic (12), lumbar (5), sacral (5 fused), and coccygeal (4 fused).
4. **Q:** What is the function of the rib cage?

MedTable AR Body System Exploration: HIGH SCHOOL

A: The rib cage protects the thoracic cavity, which houses vital organs such as the heart and lungs, and also provides support for the upper body.

5. **Q:** How many bones are in the adult human body?
   A: There are 206 bones in an adult human body.
6. **Q:** What is the largest bone in the human body?
   A: The femur (thigh bone) is the largest bone.
7. **Q:** What are the two bones of the forearm?
   A: The two bones of the forearm are the radius, located on the thumb side, and the ulna, located on the opposite side.
8. **Q:** Which bone is commonly referred to as the collarbone?
   A: The bone commonly referred to as the collarbone is the clavicle.
9. **Q:** What is the primary function of the patella?
   A: The primary function of the patella, or kneecap, is to protect the knee joint and improve the leverage of the thigh muscles during movement.
10. **Q:** What is the name of the largest bone in the lower leg?
    A: The largest bone in the lower leg is the tibia, commonly known as the shinbone.

Career Exploration:

- **Orthopedic Surgeon:** Discuss the role of orthopedic surgeons in diagnosing and treating skeletal system injuries.
- **Physical Therapist:** Explore how physical therapists help patients recover from skeletal injuries and maintain mobility.
- **Radiologic Technologist:** Explain how these professionals use imaging techniques to visualize bones and diagnose conditions.

Closure:

Today you should have gained valuable insights into the skeletal structure and its vital role in supporting and protecting our bodies. Take the next few moments to reflect on the key concepts we discussed and consider how this knowledge can be applied in fields such as health, fitness, and medicine.

NOTES:

- Have students complete the associated quiz.

MedTable AR Body System Exploration: HIGH SCHOOL

MedTable AR

MedTable AR Team Guide

Student Names Pair 1:		**Date:**	
Student Names Pair 2:		**Class Period:**	
Student Names Pair 3:			

Resources Needed:

- ☐ 3 Tablets with MedTable AR app
- ☐ 1 MedTable AR Team Guide
- ☐ 3 Student Note Guides (one per pair)
- ☐ Clipboard
- ☐ Pens or pencils

***Use your Team Guide throughout the lesson to help you stay organized and on track.**

Activities/Actions:

Instructions for Activity

1. Introduction (5 minutes)

- ☐ Look over your Student Guided Notes and Scavenger Hunt documents carefully.
- ☐ Remember to work together and communicate clearly with your partner and learning pod.

2. Group Exploration & Scavenger Hunt (25 minutes)

- ☐ In pairs, use your tablet to explore the MedTable AR Human Body Map.
- ☐ Talk with your partner about what you find and help each other understand the body systems.
- ☐ Each pair will complete a Student Note Guide.
- ☐ As a learning pod, complete the Scavenger Hunt by finding all the structures listed.

3. Group Sharing and Reflection (10 minutes)

- ☐ Each person shares at least one interesting fact they learned and one challenge they had.
- ☐ Discuss how effective communication helped your teamwork.
- ☐ Ask any questions or talk about parts of the MedTable AR experience that were confusing.

4. Wrap-Up (5 minutes)

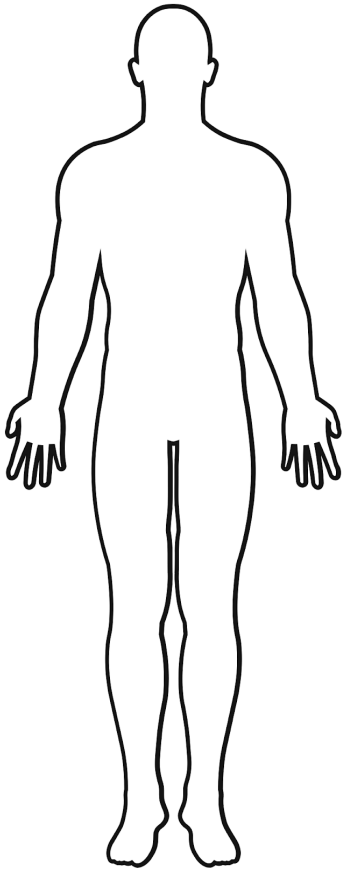
- ☐ Turn in your Student Note Guides for the teacher to check.
- ☐ Think about how all the body systems work together in everyday life.

NOTES:

MedTable AR Body System Exploration: HIGH SCHOOL

MedTable AR

Student Guided Notes

Student Name:		**NOTES:**	
Class period:			
Date:			
Body System:			
Structures & Functions **List 4 key structures and their functions in the space below**		**Discussion Question** **How does this body system work with other body systems? Give 2 examples in the space below.**	
1.		1.	
2.			
3.		2.	
4.			

Draw and label key structures on the image above.

MedTable AR Body System Exploration: HIGH SCHOOL

School Name:		**Course Name:**	
Educator:		**Year:**	

With utilization of this structured Professional Development Plan, educators will be equipped to effectively integrate MedTable AR into their classroom curriculum, enhancing student engagement and learning outcomes throughout the academic year.
This document is meant to serve as a blueprint and can be customized to fit the needs of the educator, students, and classroom.

PDP	Goal	Activities/Actions:	Resources Needed:	Expected Outcomes/Evidence of Completion:
Initial Year Goal	**Goal:** ☐ Incorporate the MedTable AR device into the classroom and align instruction with course of study, for students to explore human body systems. **Standard:** ☐ (insert standard)	☐ Attend an introductory workshop on MedTable AR. ☐ Explore the user interface of MedTable AR. ☐ Develop lesson plans that incorporate MedTable AR.	**Classroom Resources:** ☐ Access to MedTable AR software and devices. ☐ Training materials for educators. **District Resources:** ☐ PD opportunities ☐ Support to align curriculum standards ☐ Sharing of best practices **MedTableAR Support** ☐ Online PD offerings ☐ MedTable AR Educators Notes ☐ MedTable AR LMS offering (Google classroom)	☐ Demonstrate proficiency in using MedTable AR. ☐ Creation of at least two lesson plans incorporating MedTable AR. ☐ Educators report increased confidence in using the technology. ☐ Completed lesson plans and feedback from classes. ☐ Student engagement metrics (participation, interest).

Initial Year Goal Artifacts (suggest linking documents from drive)

- ★ **Workshop Attendance Records:** Documentation showing attendance of training sessions.
- ★ **Lesson Plan Samples:** Copies of lesson plans developed during workshops, demonstrating integration of MedTable AR
- ★ **Class Feedback Form:** Feedback form completed by students and teachers, providing insights into their experiences.

MedTable AR Body System Exploration: HIGH SCHOOL

PDP	Goal	Activities/Actions:	Resources Needed:	Expected Outcomes/Evidence of Completion:
Mid-Year Goal	**Goal:** ☐ Enhance student understanding of human body systems through interactive learning experiences **Standard:** ☐ (insert standard)	☐ Implement lessons across multiple grades using the device. ☐ Distribute student surveys. ☐ Gather student feedback and performance data. ☐ Adjust teaching strategies based on collected data. ☐ Analyze performance data. ☐ Conduct collaborative sessions.	**Classroom Resources:** ☐ Ongoing access to MedTable AR software and devices. (updates) ☐ Assessment tools (quizzes, surveys). **District Resources:** ☐ Thorough Professional development opportunities for educators. ☐ Support to align curriculum standards ☐ Sharing of best practices **MedTableAR Support** ☐ Online PD offerings ☐ MedTable AR Educators Notes ☐ MedTable AR LMS offering (Google classroom)	☐ Improvement in student assessments related to body systems. ☐ Collection of feedback from students regarding their learning experiences. ☐ Documentation of adjusted lesson plans based on feedback. ☐ Analysis report of student performance data.

Mid-Year Goal Artifacts (suggest linking documents from drive)

- ★ **Student Assessment Results:** Data from quizzes that measure students' understanding of human body systems before and after using MedTable AR.
- ★ **Student Feedback Surveys:** Surveys filled out by students reflecting on their engagement and interest in the subject matter when using the device.
- ★ **Annotated Lesson Plans:** Revised lesson plans that include notes on changes made based on feedback and data collected.

MedTable AR Body System Exploration: HIGH SCHOOL

PDP	Goal	Activities/Actions:	Resources Needed:	Expected Outcomes/Evidence of Completion:
End-Year Goal	**Goal:** ☐ Evaluate the overall impact of the MedTable AR device on student learning and engagement. **Standard:** ☐ (insert standard)	☐ Conduct collaborative sessions with fellow educators. ☐ Present findings to stakeholders.	**Classroom Resources:** ☐ Ongoing access to MedTable AR software and devices. (updates) ☐ Assessment tools (quizzes, surveys). **District Resources:** ☐ Thorough Professional development opportunities for educators. ☐ Sharing of best practices **MedTableAR Support** ☐ Online PD offerings ☐ MedTable AR Educators Notes ☐ MedTable AR LMS offering	☐ Detailed report on the effectiveness of the mixed-reality device in teaching body systems. ☐ Recommendations for future use and improvements. ☐ Increased interest in science among students. ☐

End-Year Goal Artifacts (suggest linking documents from drive)

- ★ **Comprehensive Impact Report:** A detailed report summarizing the findings from assessments, including statistics and qualitative data regarding student learning and engagement.
- ★ **Stakeholder Presentation Slides:** Slides created for presenting the MedTable AR integration to administration, parents, or at an educational symposium.
- ★ **Video Testimonials:** Short video clips of students and teachers sharing their experiences with MedTable AR