

Brain Dissection 3rd-5th

Vocabulary Words & Concepts

- ◆ **Arachnoid layer:** Middle layer of the meninges; a network of delicate fibers..
- ◆ **Arbor vitae (Tree of Life):** Branched white matter within the cerebellum.
- **Corpus callosum:** Band of white fibrous tissue that connects the right and left halves of the brain.
- **Cranial Nerves:** Any of the twelve pairs of nerves that arise in pairs from the brainstem.
- **Dura Matter:** Tough, fibrous layer surrounding the brain; outermost layer of the three meninges
- **Gyri:** Raised areas on the convoluted surfaces of the cerebral hemispheres.
- **Meninges:** The membranes which cover the brain.
- **Olfactory lobe:** Lower portion of the cerebral hemisphere functioning in the sense of smell.
- ◆ **Optic Nerve:** Sensory tract from the eye.
- ◆ **Pituitary gland:** An endocrine gland attached to the base of the brain; secretions from this gland control other endocrine glands and influence growth, metabolism and maturation.

*** All words may not be utilized in class. This is simply to familiarize yourself with some terms used pertaining to this subject matter ***

Can You Make Sense of This? 3rd-5th

Vocabulary Words & Concepts

- **Nerves**: Help send electrical impulses to brain.
- **Sclera**: the visible white part of the eye; a protective connective tissue coat
- **Cornea**: transparent bulge on the front of the eye; bends light as it enters
- **Iris**: the colored portion of the eye; a muscle that constricts the pupil
- **Pupil**: the black center of the iris; permits variable amounts of light into the eye
- **Lens**: focuses light onto the retina; changes shape to accommodate for near or far vision
- **Retina**: innermost layer of the eye; contains rods and cones
- **Optic Nerve**: visual pathway to the brain.
- **Nostril**: one entrance of odors into the nose; the other is through the mouth and up through the pharynx
- **Olfactory Nerve**: pathway that smell information travels from the nose up to the brain.
- **Cilia**: hair-like projections extending from the respiratory epithelium that have receptors specific to individual odors.
- **Ear Drum**: thin membrane separating the outer ear from the middle ear; vibrates with sound energy ■
- **Hammer, Anvil, Stirrup** ■ The smallest bones in the body; put into motion with vibration of the ear drum; part of the middle ear.
- **Cochlea**: fluid filled region of the inner ear lines with cilia transforms mechanical energy (sound) into electrical signals that can be sent to the brain.
- **Auditory Nerve**: Auditory pathway to the brain.
- **Semicircular Canals**: used to maintain balance.
- **Tastebuds**: Small bumps on your tongue that allow you to taste different flavors.

*** All words may not be utilized in class. This is simply to familiarize yourself with some terms used pertaining this subject matter ***

Do You See What I See? 3rd-5th

Vocabulary Words & Concepts

- ♦ **Perception**: Refers to the way we experience the world around us through our senses.
- ♦ **Depth Perception**: The ability to judge the distance and position of objects.
- ♦ **Light**: A type of energy; An illumination derived from a source of light.
- ♦ **Sclera**: The white of the eye; the outside of the eyeball.
- ♦ **Cornea**: Light enter through the cornea.
- ♦ **Iris**: It is the muscle that contracts and relaxes according to how much light is available.
- ♦ **Pupil**: Not an actually structure, it is a space. Depending on how much light is available, it gets bigger and smaller.
- ♦ **Lens**: Clear structure that focuses incoming light onto the back of the eye.
- ♦ **Retina**: Back surface of the eyeball. Light is focused onto the retina where special cells called rods and cones take information about the light and send it to the brain through the optic nerve.
- ♦ **Optic Nerve**: There are no rods or cones at this spot, so information about light that is focused on that spot never gets sent to the brain. This is the blind spot.
- ♦ **Scotoma**: When you have a blind spot that is much larger than usual.
- ♦ **Optical Illusion**: A visual experience in which the brain either misinterprets visual information—or interprets it more than one way.

*** All words may not be utilized in class. This is simply to familiarize yourself with some terms used pertaining this subject matter ***

Eye Dissection 3rd-5th

Vocabulary Words & Concepts

- ◆ **Ventral**: Front or anterior of any structure.
- ◆ **Dorsal**: The back or posterior of any structure.
- **Nerves**: Help send electrical impulses to brain.
- **Sclera**: the visible white part of the eye; a protective connective tissue coat
- **Cornea**: transparent bulge on the front of the eye; bends light as it enters
- **Iris**: the colored portion of the eye; a muscle that constricts the pupil
- **Pupil**: the black center of the iris; permits variable amounts of light into the eye
- **Lens**: focuses light onto the retina; changes shape to accommodate for near or far vision
- **Retina**: innermost layer of the eye; contains rods and cones
- ◆ **Optic Nerve**: visual pathway to the brain.
- ◆ **Aqueous humor**: A watery fluid that fills the cavity between the cornea and lens. Helps nourish the cornea and maintain the shape of the eyeball by providing an internal fluid pressure.
- ◆ **Vitreous Humor**: Jelly-like fluid that helps nourish the cornea and maintain the shape of the eyeball by providing an internal fluid pressure.

*** All words may not be utilized in class. This is simply to familiarize yourself with some terms used pertaining this subject matter ***

Fetal Pig Dissection 3rd-5th

Vocabulary Words & Concepts

- ♦ **Cranial:** Toward the head.
- ♦ **Caudal:** Toward the tail.
- ♦ **Dorsal:** Toward the top or backbone of a four-legged animal.
- ♦ **Ventral:** Toward the bottom or belly side of a four-legged animal.
- ♦ **Liver:** Among other things, the liver manufactures bile to aid fat digestion.
- ♦ **Stomach:** Curved bag-like structure under the left side of the liver.
- ♦ **Spleen:** Storage organ for red blood cells and a site for manufacture of white blood cells.
- ♦ **Heart:** The muscle that pumps blood received from veins into arteries throughout the body.
- ♦ **Arteries:** Blood vessels that take oxygenated blood away from the heart (the pulmonary artery is the exception to this).
- ♦ **Veins:** Blood vessels that bring deoxygenation blood into the heart (the pulmonary vein is the exception to this).
- ♦ **Kidney:** Functions to maintain proper waste and electrolyte balance, regulate acid-base concentration, and filter the blood of metabolic wastes, which are then excreted as urine.
- ♦ **Intestines:** The portion of the digestive system extending from the stomach to the anus and, in humans and other mammals, consisting of two segments, the large intestine and the small intestine.

*** All words may not be utilized in class. This is simply to familiarize yourself with some terms used pertaining this subject matter ***

Forensics 101 3rd-5th

Vocabulary Words & Concepts

- ♦ **Forensics**: The use of science and technology to investigate and establish facts in criminal or civil courts of law.
- ♦ **Fibers**: A thread or a structure or object resembling a thread.
- ♦ **Analysis**: The separation of whole into its constituent parts for individual study.
- ♦ **Evidence**: Data presented to a court or jury in proof of the facts in issue and which may include the testimony of witnesses, records, documents, or objects (in this case scientific proof).
- ♦ **Crime Scene**: Where the crime took place, and where evidence can be found.

*** All words may not be utilized in class. This is simply to familiarize yourself with some terms used pertaining this subject matter ***

Good Vibrations 3rd-5th

Vocabulary Words & Concepts

- ♦ **Sound Wave**: Name of energy that goes through your ears.
- ♦ **Ear Wax**: Helps defend against dust and dirt.
- ♦ **Tympanum (eardrum)**: Separates middle ear from external ear
- ♦ **Pinna**: Picks up on sound waves that are then sent down the ear canal.
- ♦ **Malus Incus Stapes (Hammer, Anvil, Stirrup)**: Smallest bones of the entire body. Vibrations pass through these 3 bones.
- ♦ **Cochlea: Snail shell structure**: Lined with little hairs that can be easily damaged with loud noises. Turns vibrations into nerve impulses.
- ♦ **Eustachian Tube**: Helps keep pressure in the ear the same as the pressure outside.
- ♦ **Matter**: 3 main types of matter are solids, liquids, and gases.

*** All words may not be utilized in class. This is simply to familiarize yourself with some terms used pertaining this subject matter ***

Heart Dissection 3rd-5th

Vocabulary Words & Concepts

- ♦ **Ventral:** Front or anterior of any structure.
- ♦ **Dorsal:** The back or posterior of any structure.
- ♦ **Atrium:** Top two chambers of the heart that bring blood into the heart.
- ♦ **Ventricles:** Bottom two chambers that push blood away from the heart.
- ♦ **Superior Vena Cava:** Brings blood from the head and arms into the heart.
- ♦ **Inferior Vena Cava:** Brings blood from the torso and legs into the heart.
- ♦ **Cardiac:** Has to do with the heart.
- ♦ **Pulmonary:** Has to do with the lungs.
- ♦ **Arteries:** Carry blood away from the heart.
- ♦ **Veins:** Bring blood into the heart.
- ♦ **Aorta:** Biggest blood vessel in the body.
- ♦ **Coronary Blood Vessels:** Blood vessels that surround the heart.

*** All words may not be utilized in class. This is simply to familiarize yourself with some terms used pertaining this subject matter ***

Kidney Dissection 3rd-5th

Vocabulary Words & Concepts

- ◆ **Ventral:** Front or anterior of any structure.
- ◆ **Dorsal:** The back or posterior of any structure.
- ◆ **Kidneys:** A pair of organs which clear “poisons” from the blood, regulate acid concentration and maintain water balance in the body by excreting urine.
- ◆ **Bladder:** Stores the urine until it is released during urination.
- ◆ **Nephron:** Filtering unit of kidneys that removes waste products from blood.
- ◆ **Ureter:** A tube that carries urine down from the kidney to the bladder.
- ◆ **Renal:** Relating to, or in the region of the kidneys.
- ◆ **Renal Capsule:** Thin membranous sheath that covers the outer surface of each kidney.
- ◆ **Renal Pyramid:** Any of the triangular sections of tissue that constitute the medulla, or inner substance, of the kidney. The pyramids consist mainly of tubules that transport urine from the cortical, or outer, part of the kidney, where urine is produced, to the calyces, or cup-shaped cavities in which urine collects before it passes through the ureter to the bladder.
- ◆ **Renal Sinus:** The cavity of the kidney, containing the calices and the pelvis.

*** All words may not be utilized in class. This is simply to familiarize yourself with some terms used pertaining this subject matter ***

Move It! 3rd-5th

Vocabulary Words & Concepts

- ♦ **Bones:** Make up your skeletal system and help with protection, structure, movement and more!
- ♦ **Muscles:** Make up muscular system and help with force and cause motion.
- ♦ **Muscle Types:** There are 3 types of muscles:
 - Skeletal
 - Cardiac
 - Smooth
- ♦ **Bone Types:** There are 4 different types of bones:
 - Long
 - Short
 - Irregular
 - Flat

*** All words may not be utilized in class. This is simply to familiarize yourself with some terms used pertaining this subject matter ***

Owl Pellet Dissection 3rd-5th

Vocabulary Words & Concepts

- ♦ **Owl Pellet**: Compact undigested parts of animals that the owl has eaten. It gets ejected from the mouth.
- ♦ **Forensics**: The use of science and technology to investigate and establish facts in criminal or civil courts of law.
- ♦ **Bones**: Make up your skeletal system and help with protection, structure, movement and more!
- ♦ **Sutures**: Special joints that connect the bones of the skull.
- ♦ **Hydrogen Peroxide**: Solution we use to allow us to take apart much.
- ♦ **Bone Types**: There are 4 different types of bones:
 - Long
 - Short
 - Irregular
 - Flat

*** All words may not be utilized in class. This is simply to familiarize yourself with some terms used pertaining this subject matter ***

Rat Dissection 3rd-5th

Vocabulary Words & Concepts

- ♦ **Cranial:** Toward the head.
- ♦ **Caudal:** Toward the tail.
- ♦ **Dorsal:** Toward the top or backbone of a four-legged animal.
- ♦ **Ventral:** Toward the bottom or belly side of a four-legged animal.
- ♦ **Liver:** Among other things, the liver manufactures bile to aid fat digestion.
- ♦ **Stomach:** Curved bag-like structure under the left side of the liver.
- ♦ **Spleen:** Storage organ for red blood cells and a site for manufacture of white blood cells.
- ♦ **Heart:** The muscle that pumps blood received from veins into arteries throughout the body.
- ♦ **Arteries:** Blood vessels that take oxygenated blood away from the heart (the pulmonary artery is the exception to this).
- ♦ **Veins:** Blood vessels that bring deoxygenation blood into the heart (the pulmonary vein is the exception to this).
- ♦ **Kidney:** Functions to maintain proper waste and electrolyte balance, regulate acid-base concentration, and filter the blood of metabolic wastes, which are then excreted as urine.
- ♦ **Intestines:** The portion of the digestive system extending from the stomach to the anus and, in humans and other mammals, consisting of two segments, the large intestine and the small intestine.

*** All words may not be utilized in class. This is simply to familiarize yourself with some terms used pertaining this subject matter ***

Survivor! 3rd-5th

Vocabulary Words & Concepts

- ♦ **Adaptation:** When a living organism is trying to survive in its environment based on its characteristics; modification of an organism or its parts that makes it more fit for existence under the conditions of its environment.
- ♦ **Survive:** To remain alive.
- ♦ **Characteristics:** A distinguishing trait, quality, or property.
- ♦ **Environment:** The circumstances, objects or conditions, by which one is surrounded.
- ♦ **Living organism:** An individual form of life, such as a plant, animal, bacterium, protist, or fungus; a body made up of organs, organelles, or other parts that work together to carry on the various processes of life.
- ♦ **Camouflage:** Concealment by means of disguise; behavior or artifice designed to deceive or hide.

*** All words may not be utilized in class. This is simply to familiarize yourself with some terms used pertaining this subject matter ***

The Beat Goes On 3rd-5th

Vocabulary Words & Concepts

- ♦ **Atrium**: Top two chambers of the heart that bring blood into the hear.
- ♦ **Ventricle**: Bottom two chambers that push blood away from the heart.
- ♦ **Cardiac**: Has to do with the heart.
- ♦ **Pulmonary**: Has to do with the lungs.
- ♦ **Areteries**: Carry blood away from the heart.
- ♦ **Veins**: Bring blood into the heart.
- ♦ **Aorta**: Biggest blood vessel in the body.
- ♦ **Energy**: The capacity of work or vigorous activity.
- ♦ **Circulate**: To move in or flow through a circle or circuit.

*** All words may not be utilized in class. This is simply to familiarize yourself with some terms used pertaining this subject matter ***