Fetal pig lab report

The fetal pig dissection was helpful for one to understand the body and all of the body's functions. The procedures helped the students precisely do the dissection correctly. The questions that were assigned helped the students have a deeper understanding of the pig's body. This dissection also helped the students become familiar with some of the organs in the body like the liver, heart, and intestines. All in all, this dissection was helpful in learning all about the body. During this lab, many procedures needed to be completed. This dissection took a week.

The dissection required many steps. This dissection required an understanding of how the body works and what the organs look like. The fetal pig dissection was helpful in learning all about the body. In order to perform this dissection correctly, certain materials were needed. A dissecting tray, scalpel, bag, scissors, and fetal pig were needed. The dissecting tray is used to put the pig inside and to make all of the incisions. A scalpel is used to make all of the incisions. The bag is used to put the fetal pig inside when the day is over. Scissors are used to cut any excess skin off. Lastly, the fetal pig is used to learn more about the human body.

Day 1

On first day of dissecting, many procedures need to be completed. Walk into the lab and put on goggles and gloves. Proceed to the lab bench assigned. One student from each bench go to the teacher and get a fetal pig in the dissecting tray with a scalpel inside. Once the pig is back at the lab bench, examine the outside of the fetal pig. Write down the fetal pig's skin color,

skin texture, length of the pig, gestational term, sex of the pig, and any markings on the pig.

Once all of the information is written down, one is ready to dissect. Make a cut through the skin and around the rib cage. Questions are ready to be answered now. Write down what is seen after the first cut, if the cut was difficult to cut through, the amount of layers of skin shown, if there is a layer of fat, what the muscles look like, and if any blood vessels are visible. After the basic questions are answered, answer if the sternum was able to be cut easily, what the sternum felt like, and if the sternum made a cracking sound. After all the questions are answered, make the next cut.

Cut in between the skin/muscles and the rib cage on each side. If needed, the ribs can be cut out. This may make working in the Thoracic cavity easier. After the incision is made, questions need to be answered. Answer what the bones of the fetal pig look like, what the consistency of the bones are like, how many ribs are shown, what the color of the bones are, and what the knee joint looks like. The last question was if one was able to find the spine and if that part was found, how many vertebrae’s there are. Look at the muscle that was being cut through.

Answer what the muscles look like, if one can see the difference between smooth, skeletal and cardiac, and if there are differences between the muscles found around the rib cage and the muscles in the legs and then explain the differences. After all of these questions are answered, day one is over. Carefully put the fetal pig into a bag, close the bag, and place the fetal pig inside of the refrigerator. One must then give the scalpel to the teacher.

After those steps are finished, clean up the lab bench, take the gloves and goggles off, and walk back into the classroom.

Day 2

Start day two of the dissection. Walk into the lab, put on a pair of goggles and gloves and walk back to the lab bench. Get the fetal pig out of the refrigerator and bring that back to the lab bench. Once the fetal pig is back at the lab bench, carefully take the pig out of the bag and place the pig inside of the dissecting tray. Go to the teacher, get a scalpel, and go back to the lab bench. Open up the pig's skin on the stomach and look inside. Cut off excess skin to be able to get a better view. After one can visibly see inside of the pig, carefully take out all of the pig's organs. Take out each organ when found. After the heart and lungs are out, measure those organs.

After all of the organs are out, answer questions. Answer what organs are located in the thoracic cavity, describe each organ one found, what color is the organ and what function these organs play, if one found the pulmonary artery and pulmonary vein, what these organs look like, and if the aorta was found, where that organ goes and what the aorta looks like. Write down what other veins and arteries are found, if the diaphragm was found, easy to cut through, what that part looks like, the diaphragm's purpose, and what system do all the organs identified belong too. After all of these questions are answered, day two is over.

Carefully put the fetal pig into a bag, close the bag, and place the fetal pig inside of the refrigerator. One must then give the scalpel to the teacher.

After those steps are finished, clean up the lab bench, take the gloves and goggles off, and walk back into the classroom.

Day 3

Start day three of the dissection. Walk into the lab, put on a pair of goggles and gloves, and walk back to the assigned lab bench. Get the fetal pig out of the refrigerator and bring that back to the lab bench. Once the fetal pig is back at the lab bench, carefully take the pig out of the bag and place the pig inside of the dissecting tray.

Go to the teacher, get a scalpel, and go back to the lab bench. All of the initial cuts from day two are made, so find out what organs are located in the abdominal cavity by looking into the fetal pig. Describe each organ that one finds, what color the organ is and what function that organ plays. After the lungs, liver, and intestines are out of the pig’s body, measure the weight of those organs. See if one can trace the veins and arteries to the lower half of the pig, what these parts are called, and the purpose those parts have in the fetal pig. Write down if the intestines can stretch and how long this part is.

Then write down what system the organs identified belong to. After all of these steps are completed, day three is completed. Carefully put the fetal pig into a bag, the organs inside, close the bag, and place the fetal pig inside of the refrigerator. Give the scalpel to the teacher. After those steps are finished, clean up the lab bench, take the gloves and goggles off, and walk back into the classroom.

Day 4

Start day three of the dissection. Walk into the lab, put on a pair of goggles and gloves, and walk back to the assigned lab bench. Get the fetal pig out of the refrigerator and bring that back to the lab bench.

Once the fetal pig is back at the lab bench, carefully take the pig out of the bag and place the pig inside of the dissecting tray. Go to the teacher, get a scalpel, and go back to the lab bench. This part will be one of the hardest procedures during this dissection. Cut open the pig's jaw and cut the tongue. Once the mouth is open, write down if the pig has teeth and how many. Note what the tongue feels like. Then, cut a circle around the eye and lift the skin up. Look inside of the eye and write down what is shown. Record what the eye looks like dissected and what parts of the eye are visible.

The group was not able to get to the fetal pig's brain. After all of these steps are completed, day four is over. Carefully put the fetal pig into a bag, the organs inside, close the bag, and place the fetal pig inside of the refrigerator. Give the scalpel to the teacher. After those steps are finished, clean up the lab bench, take the gloves and goggles off, and walk back into the classroom. There were many results in this dissection. The skin color of the pig was an off grey. The texture of the pig was very smooth and rubbery. The length of the fetal pig was roughly fourteen inches long.

The gestational term was about to be born. The fetal pig was a male. There were no markings on the pig. There are five functions of the skin. The functions are protection against disease, sensory response, formation of Vitamin D, maintaining body temperature, and waste exchange. Protection acts as defense against disease. Sensory response is where specialized

nerve cells sense and relay information to the brain. Formation of Vitamin D is formed by ultraviolet light in fat molecules in the epidermis. Maintaining body temperature is where blood vessels in the skin can help to hold or release heat maintaining a constant temperature.

Waste exchange is where sweat glands in the skin release waste in the sweat. The pig's skin has all of these five functions. After the first incision was made, liquid was oozing from the cut. Making the first incision was quite easy. There were five layers of skin visible. There was a layer of fat. The muscles were a grey color. No blood vessels were visible. Cutting through the sternum was very hard. The sternum was very hard like a rock. The opening of the sternum made a cracking sound. The bones of the fetal pig were a white grey color and were very hard. The bone's consistency is rubbery and hard.

There were thirteen ribs. The bones were a grey color. The knee joint was a yellow brown color. The knee joint is a hinge joint. One was able to find the spine. The fetal pig had twenty seven vertebrae. The muscles looked thick and grey. One can see the difference between smooth, skeletal and cardiac. Cardiac muscle was very obvious because that muscle is only in the heart. Skeletal muscles looked striated while smooth muscles were not striated. The difference between the muscles found around the rib cage and the muscles in the legs are the surfaces. The lungs and the heart are located in the thoracic cavity.

There are four chambers in the fetal pig; the right and left atrium, and the right and left ventricle. The right lung of a fetal pig has four lobes while the

left lung has three. The organs that were founded were the heart, lungs, liver, kidneys, and the intestines. The heart was squishy, brown, and rubbery. The liver was brown, and squishy like a sponge. The lungs were thick, grey, and was striated looking on the outside. The kidneys were a grey pink color and looked like large beans. The intestines looked liked worms bundled together and were in a dark brown grey color.

The heart’s function in the fetal pig’s body was to pump blood and deliver that to the rest of the body. The lungs function is to store the body’s oxygen supply and pump that air around and out of the body. The liver has many functions. The liver produces bile for the breaking down of fats, converts sugar to stored sugar, filters harmful substances from the blood, and stores vitamins and minerals. The kidneys also have many functions. The kidney separates toxins and other waste products from the blood, and regulates certain body fluids. The small intestine is where most food products are absorbed, and this organ also helps break down food.

The large intestine absorbs water and processes waste material. The pulmonary artery and vein were found. The pulmonary artery goes to the lungs to be oxygenated while the pulmonary vein goes to the heart to be distributed throughout the body. The pulmonary artery is a grey pink color and looks like a slug while the pulmonary vein looks like a tight string and is a dark grey. The aorta was found which is a part of the heart. The aorta carries the blood out of the heart from the left ventricle. The aorta was squishy, smooth, and a pink grey color. Besides the veins and arteries already found, the inferior vena cava was visible.

The diaphragm was found and cutting through this was not too difficult. The diaphragm looked like a tough and tight piece of skin. The purpose of the diaphragm is for respiration, retaining of food and increase of abdominal pressure. All of the organs that are founded so far belong to the circulatory system because all veins, capillaries, and arteries belong to this system. The small intestine, large intestine, kidneys, and liver are located in the abdominal cavity. The small and large intestines was a dark grey color and looked like a bundle of worms together. The kidneys looked like giant grey beans.

The liver looked brown and squishy like a sponge. The liver produces bile for the breaking down of fats, converts sugar to stored sugar, filters harmful substances from the blood, and stores vitamins and minerals. The kidney separates toxins and other waste products from the blood, and regulates certain body fluids. The small intestine is where most food products are absorbed, and this organ also helps break down food. The large intestine absorbs water and processes waste material. One was not able to trace the veins or arteries to the lower half of the pig. The intestines were able to be stretched out.

The intestines were seventy-two inches long. The large and small intestines are part of the digestive system. The kidneys belong to the endocrine system. The liver belongs to the digestive system. The pig has seven teeth on the bottom and four teeth on the top. The tongue felt squishy and a little rubbery. The eye ball is grey in certain areas and black in other areas. The eye was very hard. The eye was also difficult to cut. One was able to find the iris and the pupil. The group was not able to get to the brain. The eye

belongs to the nervous system while the mouth belongs to the digestive system.

Organ Name| Weight/Length| Brain| Didn’t get to| Heart| 13. 5g| Lungs| 37. 2g| Liver| 43. 8g| Kidneys| 22. 2g| Intestine small and large intestine| 54. 2g| Gestation period is the period during which an embryo develops. The pig that was dissected was a fetal pig about to be born. The fetal pig has four digits on each foot which is sixteen in total. The structure of a vein and an artery is that a vein’s wall is much thinner than an artery’s wall. There is a big structure difference by the thickness of the walls. Taste and smell are important to organisms because those senses prepare bodies for digesting food.

Tasting and smelling trigger the salivary glands. Without these senses, the stomach would not be ready for food. Smelling can also help an organism get to food and stay away from predators. The tongue helps in eating because that part helps taste the food, move the food around the mouth, and helps the mouth swallow the food by pushing the food back towards the throat. The hard and soft palates are helping in digestion because those parts are helping mechanical digestion so food can be better digested and then swallowed. The hard palate separates the oral cavity from the nasal cavity.

The umbilical vein leads to the placenta. The intestinal mesentery is the double layer of peritoneum that connects to a small part of the small intestine to the posterior wall of the abdomen. The intestinal mesentery is attached to the curvature end of the stomach. The pig liver has five lobes; the right lateral, right central, left central, left lateral, and a small caudate

lobe. One can tell where the small intestine stops and the large intestine begin because the larger intestine is larger in diameter and there is a valve called the illocecal valve where the intestines join.

Also, the large intestine has three sections; the cecum, colon, and rectum. The cecum is where the small intestine joins the large intestine. The thymus is a gland that produces several hormones which stimulate the production and development of cells. In conclusion, this dissection was very successful. This report discussed what dissecting a fetal pig is like. The objective of this lab was to have a deeper understanding of what goes on inside the human body and how vital organs are. After completing this dissection, one can now understand how everything connects to one another. All in all, this dissection helped in numerous ways.