

Chapter 1 : Paso Partners | Unit K: Dinosaurs - Lesson 4: Types of Dinosaurs

Appendix C to Part - Small Bank Holding Company and Savings and Loan Holding Company Policy Statement Policy Statement on Assessment of Financial and Managerial Factors In acting on applications filed under the Bank Holding Company Act, the Board has adopted, and continues to follow, the principle that bank holding companies should serve as.

When bank holding companies incur debt and rely upon the earnings of their subsidiary banks as the means of repaying such debt, a question arises as to the probable effect upon the financial condition of the holding company and its subsidiary bank or banks. The Board believes that a high level of debt at the parent holding company impairs the ability of a bank holding company to provide financial assistance to its subsidiary banks and, in some cases, the servicing requirements on such debt may be a significant drain on the resources of the banks. For these reasons, the Board has not favored the use of acquisition debt in the formation of bank holding companies or in the acquisition of additional banks. Nevertheless, the Board has recognized that the transfer of ownership of small banks often requires the use of acquisition debt. The Board, therefore, has permitted the formation and expansion of small bank holding companies with debt levels higher than would be permitted for larger holding companies. Approval of these applications has been given on the condition that small bank holding companies demonstrate the ability to service acquisition debt without straining the capital of their subsidiary banks and, further, that such companies restore their ability to serve as a source of strength for their subsidiary banks within a relatively short period of time. In the interest of continuing its policy of facilitating the transfer of ownership in banks without compromising bank safety and soundness, the Board has, as described below, adopted the following procedures and standards for the formation and expansion of small bank holding companies subject to this policy statement. The Board may in its discretion exclude any bank holding company, regardless of asset size, from the policy statement if such action is warranted for supervisory purposes. Ongoing Requirements The following guidelines must be followed on an ongoing basis for all organizations operating under this policy statement. Reduction in parent company leverage: Small bank holding companies are to reduce their parent company debt consistent with the requirement that all debt be retired within 25 years of being incurred. The Board also expects that these bank holding companies reach a debt to equity ratio of 1. Subordinated debt associated with trust preferred securities generally would be treated as debt for purposes of paragraphs 2. In addition, a bank holding company subject to this policy statement that has not issued subordinated debt associated with a new issuance of trust preferred securities after December 31, 1995, may exclude from debt any subordinated debt associated with trust preferred securities until December 31, 1995. Subordinated debt associated with trust preferred securities will not be included as debt in determining compliance with any other requirements of this policy statement. In addition, notwithstanding any other provision of this policy statement and for purposes of compliance with paragraphs 2. Ordinarily the Board does not view redeemable preferred stock as a substitute for common stock in a small bank holding company. Nevertheless, to a limited degree and under certain circumstances, the Board will consider redeemable preferred stock as equity in the capital accounts of the holding company if the following conditions are met: Preferred stock that is convertible into common stock of the holding company may be treated as equity. Each insured depository subsidiary of a small bank holding company is expected to be well-capitalized. Any institution that is not well-capitalized is expected to become well-capitalized within a brief period of time. A small bank holding company whose debt to equity ratio is greater than 1. It is expected that dividends will be eliminated if the holding company is 1 not reducing its debt consistent with the requirement that the debt to equity ratio be reduced to 1. Small bank holding companies formed before the effective date of this policy statement may switch to a plan that adheres to the intent of this statement provided they comply with the requirements set forth above. Core Requirements for All Applicants In assessing applications or notices by organizations subject to this policy statement, the Board will continue to take into account a full range of financial and other information about the applicant, and its current and proposed subsidiaries, including the recent trend and stability of earnings, past and prospective growth, asset quality, the ability to meet debt

servicing requirements without placing an undue strain on the resources of the bank s , and the record and competency of management. In addition, the Board will require applicants to meet the following requirements: The amount of acquisition debt should not exceed 75 percent of the purchase price of the bank s or company to be acquired. When the owner s of the holding company incurs debt to finance the purchase of the bank s or company, such debt will be considered acquisition debt even though it does not represent an obligation of the bank holding company, unless the owner s can demonstrate that such debt can be serviced without reliance on the resources of the bank s or bank holding company. Ability to reduce parent company leverage: The bank holding company must clearly be able to reduce its debt to equity ratio and comply with its loan agreement s as set forth in paragraph 2A above. Failure to meet the criteria in this section would normally result in denial of an application. The parent bank holding company has a pro forma debt to equity ratio of 1. Waiver of stock redemption filing: Y, 62 FR , Feb. It is not guaranteed to be accurate or up-to-date, though we do refresh the database weekly. More limitations on accuracy are described at the GPO site.

Chapter 2 : Micro Injection Molding the World's Smallest Medical Parts

part - membership of state banking institutions in the federal reserve system (regulation h).

These policies have been developed to take into account the unique concerns and operations of small businesses in the administration of the national railroad safety program, and will continue to evolve to meet the needs of the railroad industry. For purposes of this policy statement, the Regulatory Flexibility Act 5 U. FRA believes that these differences necessitate careful consideration in order to ensure that those entities receive appropriate treatment on compliance and enforcement matters, and enhance the safety of railroad operations. Therefore, FRA has developed programs to respond to compliance-related inquiries of small entities, and to ensure proper handling of civil penalty and other enforcement actions against small businesses. Also, FRA personnel provide guidance to small entities, as needed, in applying the law to specific facts and situations that arise in the course of railroad operations. These agency communications take many forms, and are tailored to meet the needs of the requesting party. FRA inspectors provide training on the requirements of all railroad safety statutes and regulations for new and existing small businesses upon request. Also, FRA inspectors often provide impromptu training sessions in the normal course of their inspection duties. FRA believes that this sort of preventive, rather than punitive, communication greatly enhances railroad safety. In some regions of the country where the concentration of small entities is particularly high, FRA Regional Administrators have established programs in which all small entities in the region meet with FRA regional specialists on a regular basis to discuss new regulations, persistent safety concerns, emerging technology, and compliance issues. Also, FRA regional offices hold periodic conferences, in which specific blocks of time are set aside to meet with small businesses and hear their concerns. In addition to these communication practices, FRA has instituted an innovative partnership program that expands the extent to which small entities participate in the development of policy and process. The committee consists of a wide range of industry representatives, including organizations that represent the interests of small business. The small entity representative groups that sit on the RSAC may appoint members of their choice to participate in the development of new safety standards. FRA will make every effort to develop new and equally responsive communication procedures as is warranted by new developments in the railroad industry. Small Entity Enforcement Policy FRA has adopted an enforcement policy that addresses the unique nature of small entities in the imposition of civil penalties and resolution of those assessments. In general, the presence of both good faith and prompt remedial action militates against taking a civil penalty action, especially if the violations are isolated events. Once FRA has assessed a civil penalty, it is authorized to adjust or compromise the initial penalty claims based on a wide variety of mitigating factors, unless FRA must terminate the claim for some reason. FRA has the discretion to reduce the penalty as it deems fit, but not below the statutory minimums. FRA staff attorneys regularly invite small entities to present any information related to these factors, and reduce civil penalty assessments based on the value and integrity of the information presented. Small entities should be sure to address these factors in communications with FRA concerning civil penalty cases. Often, the plan provides small entities with a reasonable time frame in which to make improvements without the threat of civil penalty. If FRA determines that the entity has failed to comply with the improvement plan, however, enforcement action is initiated. However, FRA is committed to obtaining compliance and enhancing safety with reasoned, fair methods that do not inflict undue hardship on small entities. It is not guaranteed to be accurate or up-to-date, though we do refresh the database weekly. More limitations on accuracy are described at the GPO site.

Chapter 3 : Jejunum's Function in the Small Intestine and Digestive System:

Appendix C to Part - FRA's Policy Statement Concerning Small Entities This policy statement required by the Small Business Regulatory Enforcement Fairness Act of (Pub. L.) (SBREFA) explains FRA's communication and enforcement policies concerning small entities subject to the federal railroad safety laws.

The appendix is connected to the mesentery in the lower region of the ileum , by a short region of the mesocolon known as the mesoappendix. Although it has been long accepted that the immune tissue surrounding the appendix and elsewhere in the gut—called gut-associated lymphoid tissue —carries out a number of important functions, explanations were lacking for the distinctive shape of the appendix and its apparent lack of specific importance and function as judged by an absence of side effects following its removal. William Parker, Randy Bollinger, and colleagues at Duke University proposed in that the appendix serves as a haven for useful bacteria when illness flushes the bacteria from the rest of the intestines. Research performed at Winthrop—University Hospital showed that individuals without an appendix were four times more likely to have a recurrence of *Clostridium difficile* colitis. This structure helps in the proper movement and removal of waste matter in the digestive system, contains lymphatic vessels that regulate pathogens, and lastly, might even produce early defences that prevent deadly diseases. The suggestion was that it is the shrunken remnant of the cecum thought to have been present in a remote ancestor of humans. This notion is still widely held. A study, however, refutes the idea of an inverse relationship between cecum size and appendix size and presence. He suggested that the appendix was used for digesting leaves as primates. It may be a vestigial organ of ancient humans that has degraded to nearly nothing of its original purpose or evolved to take on a new purpose over the course of evolution. The very long cecum of some herbivorous animals, such as in the horse or the koala , appears to support this theory. Human ancestors may have also relied upon this system when they lived on a diet rich in foliage. As people began to eat more easily digested foods, they may have become less reliant on cellulose-rich plants for energy. As the cecum became less necessary for digestion, mutations that were previously deleterious and would have hindered evolutionary progress were no longer important, so the mutations survived. It is suggested that these alleles became more frequent and the cecum continued to shrink. After millions of years, the once-necessary cecum degraded to be the appendix of modern humans. In rare cases, adenomas are also present. Appendicitis Appendicitis is a condition characterized by inflammation of the appendix. This pain is typically a dull, poorly localized, visceral pain. This peritoneal inflammation, or peritonitis , results in rebound tenderness pain upon removal of pressure rather than application of pressure. Typically, point skin pain is not present until the parietal peritoneum is inflamed, as well. Fever and an immune system response are also characteristic of appendicitis. Untreated, the appendix may rupture, leading to peritonitis , followed by shock, and, if still untreated, death. Appendectomy The surgical removal of the appendix is called an appendectomy. This removal is normally performed as an emergency procedure when the patient is suffering from acute appendicitis. In the absence of surgical facilities, intravenous antibiotics are used to delay or avoid the onset of sepsis. In some cases, the appendicitis resolves completely; more often, an inflammatory mass forms around the appendix. This is a relative contraindication to surgery. The appendix is also used for the construction of an efferent urinary conduit, in an operation known as the Mitrofanoff procedure , [27] in people with a neurogenic bladder. The appendix is also used as a means to access the colon in children with paralysed bowels or major rectal sphincter problems. Smith of Midwestern University and colleagues explained: This function is potentially a selective force for the evolution and maintenance of the appendix. Three morphotypes of cecal-appendices can be described among mammals based primarily on the shape of the cecum: In addition, long narrow appendix-like structures are found in mammals that either lack an apparent cecum as in monotremes or lack a distinct junction between the cecum and appendix-like structure as in the koala. A cecal appendix has evolved independently at least twice, and apparently represents yet another example of convergence in morphology between Australian marsupials and placentals in the rest of the world. Although the appendix has apparently been lost by numerous species, it has also been maintained for more than 80 million years in at least one clade. This complex evolutionary

history of the appendix, along with a great heterogeneity in its evolutionary rate in various taxa, suggests that it is a recurrent trait. Current epidemiological data on the cause of death in developed countries collected by the World Health Organization in show that acute diarrhea is now the fourth leading cause of disease-related death in developing countries data summarized by The Bill and Melinda Gates Foundation. Two of the other leading causes of death are expected to have exerted limited or no selection pressure.

Chapter 4 : Appendix (anatomy) - Wikipedia

*Policy Statement on Assessment of Financial and Managerial Factors*In acting on applications filed under the Bank Holding Company Act, the Board has adopted, and continues to follow, the principle that bank holding companies should serve as a source of strength for their subsidiary banks.

The food is mixed with enzymes in the saliva secreted by the salivary glands located below the tongue, near the lower jaw. The saliva softens the food and allows the food to be compacted into a soft mass that is easily swallowed. Saliva also provides enzymes that start the digestive process by breaking down complex carbohydrates into simple sugars. The break down of proteins and fats does not begin in the mouth. The soft palate, a tissue flap at the back of the mouth, presses upward to keep food from going up into you nose.

Esophagus The bolus passes from the mouth through a long muscular tube called the esophagus. The esophagus is about 10 inches long and connects the throat to the stomach. The process by which the food or bolus is pushed through the esophagus and into the stomach is known as peristalsisâ€”wavelike contractions of the muscles in the lining of the esophagus. Where the esophagus meets the stomach there is a ring-like muscle known as the cardiac sphincter.

Stomach The connection between the esophagus and the small intestine is a sac-like pear-shaped muscular bag with walls of muscles called the stomach. The stomach is about 12 inches long and 6 inches wide at the widest point. However, because of its elastic nature, its size and shape can change depending on the food inside. The stomach is made up of five layers. The next layer, the submucosa, is covered by muscularis which moves and helps in the mixing of the food. Then comes the two layers of covering called subserosa and serosa the outermost layer. The folded lining of the stomach allows it to expand when filled with food. Enzymes and stomach juices begin the digestion of fats and proteins by separating them into their basic parts of amino acids and fatty acids. Only a small amount of carbohydrate digestion happens in the stomach because the stomach acids are so strong. However, substances like water and alcohol are absorbed directly from the stomach. The stomach takes up to five hours to mix and digest solid food. Once in the small intestine, carbohydrate digestion starts again and your body starts to absorb the nutrients from the food. A thick, ring-like smooth muscle, the pyloric sphincter, separates the stomach from the duodenum of the small intestine. This muscle is usually closed, but relaxes and opens to let the acid chyme into the small intestine, then closes to keep the chyme from going back into the stomach.

Small Intestine **Small Intestine** **Inside Large Intestine** The small intestine is divided into three partsâ€”the duodenum, jejunum and ileum. The small intestine is about 20 feet long and 1 inch wide. By putting your flattened palm on your belly button, you are covering most of the small space where the small intestine is coiled up. The small intestine is lined with protective mucus to prevent it from digesting itself. The lining has thousands of tiny folds and projections called villi. There are tinier projects on each villus called microvilli. These folds make a huge area for absorbing food. Amino acids, sugars, vitamin C, the B vitamins, iron, calcium and magnesium are carried through the blood stream to your liver where they are processed and sent to the rest of the body. Fatty acid, cholesterol, and vitamins A, D, E, and K go into the lymph system and then into the blood. These also go to the liver, get processed and sent out to other cells in the body.

Duodenum It is a inch long C-shaped tube found around the head of the pancreas which forms the first part of the small intestine right after the stomach. The food, now chyme, enters from the stomach into the duodenum where it is mixed together with the bile and other digestive juices produced by the accessory digestive organs and drained into the duodenum. Absorption of food also begins here with the absorption of vitamins, minerals and other nutrients. In particular, before the food passes into the next part of the small intestine iron, calcium and magnesium are absorbed here. The rest of the food is passed into the jejunum.

Jejunum **Function** The second middle section of the small intestine is a coiled tube which is thicker and more vascular than the ileum. It lies in the belly button area of the abdomen. There are small fingerlike projections in the wall of the jejunum called villi. These villi are covered with smaller projections called microvilli. The villi increase the surface area of the jejunum and allows much more absorption of nutrients in this part of the small intestineâ€”most of the food absorption is doneâ€”in this part of the digestive tract. Simple sugars, water soluble vitamins except vitamin C and some Bs and amino acids

made from the food is passed from the villi into the blood stream while the fat is passed into the lymph capillaries. The rest of the food passes into the ileum. Ileum The last part of the small intestine is mainly the pelvic region. It looks very similar to the jejunum. However, the nature of the small intestine gradually changes. It is thinner and has fewer blood vessels as compared to the jejunum. The last absorption of nutrients from the food takes place here—amino acids the end products of protein digestion , fat-soluble vitamins A, D, E, and K , fatty acids the end products of fat digestion , cholesterol, sodium, potassium alcohol, and B The terminal ileum is an important part as this is where vitamin B12 is absorbed into the blood capillaries. The unabsorbed and undigested food then passes from the ileum into the cecum, the beginning of the large intestine. This food residue is full of bacteria. Large Intestine Large Intestine — Click for larger image The large intestine forms the last part of the digestive tract, which is about 5 feet long and wider than the small intestine. The surface area on the inside of the large intestine is smaller than the small intestine. The large intestine can be divided into the cecum, colon and rectum. The undigestible food waste passes from the small intestine into the cecum which then passes into the colon further divided into ascending colon, transverse colon, descending colon and sigmoid colon where the fluids and salts are absorbed. The undigested food moves up the ascending colon, across the transverse colon, down the descending colon and into the rectum. The colon soaks up to 50 fluid ounces of water every day. After absorption, the remaining undigested matter is squeezed into a bundle called feces. Feces is made of fiber, undigested food, cells that slough off the lining of the intestines and bacteria. They make vitamin K and B12 which is absorbed by the colon wall, break down amino acids and make nitrogen, live off of fiber which makes gas. When the bacteria finish with the feces, it is passed into the rectum, where it is stored until it is passed out through the anus as a bowel movement. The anus has voluntary and involuntary sphincter muscles which can tell the difference between gas and solid contents. A vestigial organ an organ that had a purpose in the past but is now useless or close to it , the appendix, is attached to the large intestine at the cecum. Though this organ is potentially of no use, it can cause pains and complications once it gets inflamed, a disorder called appendicitis. Accessory Digestive Organs and Glands Though not directly part of the digestive tract, the accessory digestive organs play a major role in digestion. The accessory digestive organs include the salivary glands, pancreas, liver and gallbladder. Glands are organs that secrete hormones. Salivary Glands There are three pairs of salivary glands: It also helps break down starches in the food. Pancreas A carrot-shaped gland located behind and under the stomach, the pancreas acts both as an endocrine gland and an exocrine gland. From the exocrine part it secretes pancreatic enzymes amylase and lipase which pass through the pancreatic duct into the small intestine the duodenum. The pancreatic duct joins the bile duct. These enzymes aid in the further breakdown of food, mainly the carbohydrate, protein and lipid part of the food. From the endocrine part it secretes insulin and glucagon. Insulin enables you to digest and metabolize carbohydrates. The pancreas also secretes an antacid to help settle an upset stomach. It is the largest organ of the human body and is below the diaphragm in the upper epigastric region of the abdomen. It has many functions including production of chemicals necessary for digestion, synthesis of protein and detoxification. The major function of the liver is to produce bile yellowish-green fluid which aids in the digestion and absorption of fats. It also stores glucose, iron and vitamins A, B12, D etc. The liver also sends out the nutrients and substances digested from the food to the cells of the body. Gallbladder The gallbladder is a small organ located just below the liver. It is about 3 inches long and shaped like a hollow balloon. Its main function is to store bile produced by the liver and release it into the duodenum when food that contains fat needs to be broken down and absorbed. The bile in the gallbladder becomes more concentrated and more effective in breaking down the fat. Gallstones are a common disorder of the gallbladder. Gallstones are formed when there is too much cholesterol in the bile and often need removing the gallbladder. Gallstones can get as big as a golf ball. The teeth and tongue also aid in digestion and are very much a part of the digestive system. Diarrhea The condition of watery stools during a short period is called diarrhea. It is a very common problem and most often gets better on its own. Dehydration is a major side effect of this problem and thus the fluid lost should be replaced with constant intake of saline water. Diverticular Disease In some people, especially the elderly, the colon begins to have sac like protrusions called diverticula singular diverticulum. This condition is known as diverticular disease. It is generally caused

due to constipation where there is increased pressure to pass stool that is too hard. The pressure causes weak parts of the colon to bulge causing diverticula. In cases where the diverticula get infected, a condition called diverticulitis; it needs thorough treatment by a doctor.

Chapter 5 : What Are the Human Body's Smallest Parts? - Kids Discover

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There were many different kinds of dinosaurs. We can use geometric shapes to draw their pictures. Yes, that would be a good zoo if it had all those different kinds of animals. What would you think of a zoo that had only monkeys? What if it had only tigers? In the time of the dinosaurs, the earth was like a zoo -- many animals were living on it. There were many dinosaurs and there were different kinds -- many different shapes and sizes. They not only looked different from each other, but they also ate different food. But there is one thing that was the same for all of them, and that is one of the things we will discover today. Exploring the Idea The children study pictures of at least five dinosaur types, noting different body features of the different dinosaurs. At the Science Center, students 1. Each student is given a hat to wear if he or she is a paleontologist; other students are given fossil parts. Those holding the fossil parts hide while the paleontologists look for them. The paleontologists work in small groups to "fit the fossil parts. They report their "findings" to the class. At the Mathematics Center, the students 1. They use the shapes to draw several dinosaurs. See Appendix C- Geometric Dinosaurs. Materials Pictures of different-size dinosaurs - See Appendix A- Dinosaur Several linking counters or paper clips to measure the pictures Procedures Working in pairs, the students make link chains using paper clips or any of the commercially made linking counters to the length of the dinosaurs in the pictures given to the students. The paired students say which chain, and which dinosaur, is longer by comparing the chains side-by-side, i. The paired students say how much longer or how much shorter each dinosaur is by counting the unmatched links. Getting the Idea How many different types of dinosaurs have we studied? Yes, there were many different kinds on earth before they became extinct. Were they all the same size? No, some were small and some were very large. How do we know that some were small and some were large? Yes, paleontologists have found bones of different shapes and different sizes. The shapes of the bones tell scientists many things. For example, if the bones were large, then the animals had to be large. If the footprints were small, then the animals were small. Where did we have to go to find fossils? Fossils have been found in swamps, in mountains, and in many other places. What tools have to be used to find them? Ask the students to repeat the names of the different dinosaur types. Which ones were the small ones? When you used your geometric shapes to construct the dinosaurs, which shapes were easy to use? Yes, the ones with straight lines are easy to use because you can fit them together. What about the circular shapes? Yes, if you fit the circles together, there are some spaces left over. You can combine the different geometric shapes to make new shapes. At the Listening Center, the students listen to tapes and "read" tapes of one or two of the new books. Organizing the Idea 1. Name of Dinosaur, Eats, and Habitat 2. This work goes into their journals. There were no flying dinosaurs or swimming dinosaurs. Those are flying reptiles and prehistoric marine animals. Known as Thunder Lizard, that is true. King of the dinosaurs, that I am. I make many run and hide. Chorus Dinosaurs, Dinosaurs, that we know. Some were large, some were small. A big, big head, and frilly bones. At the Drama Center the students develop and act out a play with the title: What is the name of your favorite dinosaur? Why did you pick that one as your favorite? Which of the dinosaurs that we have studied was the largest? How do you know? How are the different kinds of dinosaurs alike? How are they different? How many different dinosaurs have we studied?