

# Insects reptiles fish and birds biology essay

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This is a good attempt Stephen. Your composing manner resembles more to those found in the universe of literature or news media instead than in academic environments. This is chiefly because in academic books you need to pull your beginnings from believable research and endorse up with mentions all your statements/arguments. Furthermore, the construction of academic papers is stricter and clearer than the 1 you use.

Your plagiarism degrees have decreased and you seem to compose about the LO ' s independently without copying others work. You should go on that manner until the terminal of your entries. When you write an essay you have to demo where you have obtained the information that you included. So, in each sentence, statement or paragraph that is taken from a beginning, you have to admit your beginnings by come ining a parenthesis harmonizing to the Harvard system provided in your notes or available in the cyberspace. Why do n't you seek that? You were prompted to make that in the yesteryear as good. It is a really easy undertaking and it is harmonizing to academic authorship manner, which is a end of yours since you are prosecuting this grade. You managed to reply to all LO ' s but without accomplishing Merit or Distinction.

Your text shows that with a small spot of attempt and by following the coach ' s advise, you will be able to accomplish that every bit good. In LO1 1. 1. You have explained basic categorization systems based on honologous characteristics. Some of the most diverse animate being groups in the universe live in our ain back gardens. Birds are one of these groups, and are abundant in most topographic points in the universe. They are a brilliant lightweight species, but although little and stamp are still unusually tough for <https://assignbuster.com/insects-reptiles-fish-and-birds-biology-essay/>

their size. Most species of birds can wing and utilize this indispensable property in scavenging for nutrient and tracking possible quarry.

The Ostrich is the largest of the Bird species, and although they can run up to 65mph they are flightless none the lupus erythematosus. Nice illustration. The bird is a craniate ; merely like worlds as their organic structure construction chiefly map is to back up the organic structure. Their wings are the chief plus as they create much of their lifting force by forward motion through the air.

The power for rolling their wings comes from their pectoral muscle major musculuss in its thorax. As these musculuss tighten they pull the flying down and back. They have control of the way they move as the sinews in the wing can flex giving greater curvature control and way. LO1 1. 1.

Anatomy elements for birds. A bird ' s plumes provide so much more than merely insularity or flight. The plumes are made up of a tough, hempen protein called Keratin. Their maps vary from waterproofing, disguise and protection against marauders. Waterproofing is of import for birds which spend a batch of clip on the H2O such as sea birds, and waders.

A bird cleans itself as it moves and removes soil or parasites which cleaving to them. LO1 1. 2. map elements for plumesIn their home ground, flightless birds can be susceptible to predator onslaughts.

The Kiwi is a flightless bird which lives in a home ground in its native land of New Zealand. Nice illustrationThis nocturnal animate being has a unsmooth and bushy brown coat which they use to camouflage themselves at dark

from marauders such as Stoats and wild Cats. Good distinction, related to LO1 1. 3.

The construction of a bird ' s beak besides maps in legion of ways. This is used to scrounge for nutrient, onslaught quarry and sense the opposing menaces of marauders. LO1 1. 2. Good. The beak map. The Red-Cockaded Woodpecker uses its beak to bore holes in the tree to protect its babes by let go ofing the gluey sap out of the dullard holes which oozes down the tree forestalling marauders such as serpents to mount.

Nice illustration Fish are besides vertebrate animate beings as they excessively have a spinal column. LO1 1. 3. Similarities of home grounds. Sharks and Rays come under one of the two groups of fish called Elasmobranches which are cartilaginous fish. The other group are known as Teleost fishes which are competently named bony fish. Both of these groups consist of fish which have difficult coarse tegument which is rough like emery paper.

LO1 1. 1. Anatomy elements for fish A shark ' s construction is made up of gristle ; and because of it being more flexible than bone it helps the shark to maneuver in smaller infinites in their home ground and onslaught quarry every bit good as defend themselves from marauders below and above the H<sub>2</sub>O. LO1 1. 3. fish endurance They have excess mineral sedimentations in their jaws which helps do their jaws stronger to seize with teeth with.

A sharks gill assist the animate being to take a breath under H<sub>2</sub>O and its sidelong line is a jelly-filled tubing merely below the tegument. It opens to the H<sub>2</sub>O outside by a series of bantam pores. LO1 1. 2. Good description and <https://assignbuster.com/insects-reptiles-fish-and-birds-biology-essay/>

indispensable map here for fish. The map of this is to assist the Shark detect motion in the H<sub>2</sub>O so it can assist to seek for its quarry. Unfortunately this map besides acts as a negative point because it allows sharks to come into shorelines where people normally are found swimming and surfing and has caused human deaths every bit good as their ain destinies being sealed. Good.

Any beginning? Any informations? Numbers? This species of fish besides has a particular liver which allows them to drift. A reptilian 's construction can differ from each animate being. The tegument is normally harsh and tough which helps them from being attacked by marauders. LO1 1. 2.

Function for reptilians. Reptiles range from many animate beings such as Tortoises, Snakes, Lizards and Crocodiles. In fact the latter one of these animate beings are one of the two lasting groups from an evolutionary line that besides contained the nonextant dinosaurs. The organic structure construction of these reptilians although are technically Amphibians, can populate in and out of the H<sub>2</sub>O and possess long jaws for rupturing meat of their quarry. Their organic structure is long and streamlined which allows them to travel rapidly in the H<sub>2</sub>O utilizing its tail as a rudder.

They have protected armors like tegument which allows them to protect themselves from other Male crocodiles which may assail for district intents. Crocodiles besides possess fossilized graduated tables on the dorsum and its tail called osteoderms that form protective armor. This allows them to swim long distances in their home ground to seek for nutrient utilizing their webbed hind pess and tail to swim such velocities up to 35km/hr. LO1 1. 1.

reptilians ' anatomy elements Insects are the most diverse and abundant group of animate beings on the planet. Good. Any beginning? Any informations? Numbers? These little animate beings are anyplace and everyplace. They range from Ants, flies, Cockroaches to both Butterflies and Dragon flies. The construction of an Insect is supported by an exoskeleton and possesses a segmented organic structure which consists of a caput, thorax and venters. LO1 1. 1.

Anatomy elements for insects The caput of an Ant supports its aerial which is indispensable for the emmet as its map is toprehend quarry and even have been used in copulating rites. The integument portion of an Insect allows flexibility of the animate beings and allows freedom of motion without loss of defense mechanism and protection. The cuticle is little thin bed of non-cellular stuff which lines the external surface of the insect ' s organic structure.

The venters of an Ant contains two tummy. One of these holds nutrient whilst the other is used to portion nutrient with other emmets. An emmet is a worker, and uses its difficult outside to work within its settlement of a home ground. Its chief map is to clean and roll up nutrient and protect the Queen Ant.

Other emmets in the settlement have specific occupation functions, from rubbish aggregators to The Army Ants which occupation function is in its rubric. Good. LO1 1. 2. and 1. 3. Function and survival information for insects and a good example/analysis for emmets. The endurance of each of the above species is imperative to the hereafter of their species.

Insects, Fish, Reptiles and Birds all have some comparings which are similar to one another every bit good as some differences in the manner they choose to last in their environment. Disguise is an built-in plus to hold in the woods of South America. With the changeless menace of marauder onslaughts the Chameleon has its ain defense mechanism mechanism in order to last. This Reptile has the ability to alter coloring material on cue to intermix into their milieus.

A similar technique in Insects is the little Katydid, which is a kind of like a Cricket. They can intermix into the bark of a tree to avoid sensing from marauders. They can besides copy Lichen, Twigs and Leaves. The Differences between some of these species in order for them to last in their environment vary from one another. There are other ways of endurance instead than protecting themselves from marauders. More frequently or non, these species have to contend for nutrient when there ' s no other pick.

The Praying Mantis is an ambush marauder. It perches motionless on a subdivision expecting its quarry and ambuscades it when the clip is right. They use their map of binocular triangulation to estimate the distance it is from the quarry. Whilst the Insect has this predation onslaught which is fuelled by the disguise ability. The Shark is a natural marauder and most of their quarry does non detect the work stoppage as they move so rapidly.

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**html )**

Whilst running they use electroreception which is the ability to aroma, hear and turn up their quarry stat mis off from themselves. Good. Further analysis of survival elements LO1 1. 3. Chordates are animate beings which possess a notochord correct which is a skeleton rod which provides support during the animate being ' s development ( is it specifically related to animate beings ' development? In some instances it is even restricted during development ) . Birds, Reptiles, Fish and Insects are this full group. Relevant to LO2 2. 1.

But is the notochord the lone typical feature of chordates? These species have evolved over a clip period of a 1000000s of old ages ago. We have seen this in the fossilized stones that have been excavated from the land. When? How? Any beginning? Any particulars here? We can see who? beginning? Relevant research? that their ascendants were non as advanced in important alterations as the animate beings we can see today.

This has something to make with the copiousness of marauders unlike million of old ages ago. Climate alteration and the addition in human population have besides impacted the development of these animate beings. Source? How do you cognize that? Birds, Insects, Fish and Reptiles have had to accommodate to their environment by working otherwise and besides accommodating their organic structure construction every bit good in a manner which best suits them to their environment. Correct, relevant to LO2 2.



1. Features which a fish possess are pharyngeal slits, which are indispensable to strain out H<sub>2</sub>O and filter the nutrient atoms in the H<sub>2</sub>O from which they eat. Correct. Another feature of the chordates. Fish were the first of all time craniates and were the discovery for land walking craniates ( tetrapods ) . This was important alteration in evolutionary history.

Beginning? They have learned to last in their environment by protecting themselves. This is apparent in the Clownfish. This little reef fish have evolved over clip to drive the sting from nematocysts of a Jelly fish and Sea Anemone. With this version the fish sits within the Sea Anemone cleaning its new Home whilst avoiding possible marauders.

The procedure is known as Symbiogenesis. This is non Symbiogenesis. This is Symbiosis and specifically symbiosis. Reptiles are besides chordates and have besides been able to accommodate schemes to accommodate their environment as they excessively have evolved over many old ages. A Lizard possesses a bed of midst tegument which gives off a little sum heat that is internally fuelled, therefore they ' ve adapted over clip to utilize thermoregulation, which is the ability to modulate their ain organic structure heat. Good illustration LO2 2. 1. Birds have been have debated by scientists and research workers alike that they have been believed to of evolved from dinosaurs.

Beginning? Around 130 million old ages ago lived a bird like animal called a Liaoningornis ; this species did n't look like its suspect ' s ascendants which are these fishy ascendants? nevertheless contained features of them. Which are these common features? Any beginning here? For 1000000s of old ages

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Birds have learned to accommodate to populate within their environment. The flightless birds such as Penguins live in the frozen tundra. In order to maintain warm they have evolved a thick set of overlapping plumes which keeps them warm all twelvemonth unit of ammunition.

These little plumes which are made up of bantam fibrils that trap the air in a bed around the organic structure enable them to digest rough winters. LO2 2. 1 and 2. 2 Relevant to adaptive schemes. Development of these adapted schemes have been theorised and debated by many scientists, phytologists and Naturalists likewise.

The most common attack argument is to that the theory of birds germinating from dinosaurs. Recent findings of fossilized stone may hold broke through this theory as they have found fossilised stone of hereditary birds with plumes, fuelling the argument that Birds have evolved over clip from their prehistoric ascendants. Recognised Naturalist Richard Attenborough believes that Birds must be the most successful altered animal on Earth even more so than the following chordate on my list, the Insect. Some Insects have evolved altered schemes to avoid marauders by utilizing the ability of Mimicry. This is where an Insect will sit on a foliage and mime its motion in the air current wryly avoiding marauders. They can besides utilize this accomplishment for predation onslaughts themselves to catch flies. The oldest known bird dodo is the ill-famed Archaeopteryx which was discovered two old ages after the publication of Darwin ' s the beginning of Species book. ( hypertext transfer protocol: //www.

fossilmuseum. net/Evolution. htm )This was the ground why there ' s such argument sing the evolutionary theory of birds. This animal had flying similar extremities every bit good as plumes, but besides possessed two long legs and three toes tipped claws. What we can consider from this fossilized ascendants that the species of birds which we can see today have evolved from this species with more advanced extremities and limbs in order to take flight from marauders and besides posses more altered beaks and claws to seek and run for nutrient. LO2 2.

3. relevant but a bit general informationThe morphological procedures of the undermentioned animate beings differ from one another although they use their organic structure construction in the same ways for nutrient, predation and survival tactics. The signifier and construction of these animate beings are indispensable as their construction have adapted to accommodate their environment over clip as they have gained traits from their passed ascendants.

An Insects organic structure are segmented in parts which are supported by a difficult outside which is used to protect themselves from possible onslaughts. On the top of their caput lies a brace of sensory aerial which are used for counsel and feeling at hand danger. These are besides used By Fire Ants to roll up nutrient and leaves and take them back to their settlement. Insects are equipped with two braces of wings mediate their organic structure sections.

These have become really utile as they are used to wing off from marauders or catch possible quarry. This group consists of one of the lone invertebrate

groups to hold developed wings, which is a large advantage over other invertebrates. The little insects begin life normally from an egg which is produced by the parent. As the baby additions in growing it goes through a series of phases in order to make the grownup phase. In some Insects they go through a complete metabolism alteration of their organic structure construction.

This is apparent in a Butterfly as it begins life as Larvae and so alterations into a Caterpillar before it is so enclosed in a cocoon. The following phase is where important alterations occur in the morphology of the animate being. The Structure of the species wholly alterations from its signifier and emerges from the cocoon as a Butterfly which completes the full circle of metabolism of an Insect. Most of the animate beings we see on a regular footing are classed under the phylum Chordata which merely like ourselves all possess a characteristic which helps the organic structure stiffen and provides the musculuss with support ; this is known as the notochord. This feature is apparent in reptilians. The difficult outside of a Crocodile with its thick tegument is a powerful marauder. The Crocodile possesses a bosom which is divided into four parts. Their webbed forepart and back pess are utile to glide in the H<sub>2</sub>O ; their organic structure construction allows them to be buoyant in the H<sub>2</sub>O and can remain motionless for hours at a clip, waiting for the opportune minute for their possible work stoppage.

These Reptiles are believed to hold non evolved over clip, even far back to the dinosaur epoch. These are the closest life species today, and are theorised about being the closest relations to the Dinosaur. Fish posses a filter feeding system in their organic structure which is otherwise known as a <https://assignbuster.com/insects-reptiles-fish-and-birds-biology-essay/>

pharyngeal slit ; these slits allow H<sub>2</sub>O to go through through the gaps and into the oral cavity and back out through the atriopore. The hair like atoms called the cilia trap the H<sub>2</sub>O molecules in them and separates the nutrient atoms for the being to eat. This allows the Fish to intake the foods and energy in order to last. Most fish have evolved over clip to come accustomed to temperature control, salt tolerance and the ability to take a breath air when needed. There ' s merely a little sum of these species which can accommodate to all of these things. A Great White shark is unable to accommodate to freshwater unlike the Bull Shark as they have the capacity to defy both the fresh and salt Watersss.

These abilities have been adapted over clip every bit good as their organic structure form. This is apparent in Tuna. They have a streamlined organic structure as they move invariably in multiple migrations.

The Flounder Fish has worked out its ain manner of sensing. Its chapfallen organic structure lies motionless on the ocean floor, which is overlooked by possible marauders. These versions serve as an indispensable ingredient to the species endurance. The construction and map of a Bird consists of a vertebral column and a skull.

These animate beings are in changeless control of their organic structure temperatures as they aculeate to their milieus. Their forelimbs are modified into wings which they use in flight and in the instance of a species such as the Eagle, they have big talons which are able to catch quarry and keep it for long distances on their manner back to their nest. Merely like when we fly on a plane, the cabin is pressurised because there is less oxygen available in

the air. This would otherwise be an issue for certain animate beings frequent in the sky ; therefore a Bird requires a higher metabolic rate for winging as they require an addition in oxygen demand.

This procedure catapulted the development of flight in birds and changed the manner birds were perceived from so on. Flightless birds such as the Emu and Ostrich may non hold the flight ability of other birds, but they possess the headlong velocity and explosions of gait up to velocities of around 50mph. Evolutionary theory has been debated over many old ages. Within the Bird species as the universe changed, so did their species. They had to accommodate versions to last for future old ages, go throughing on their traits to future coevalss. An illustration of this theory is apparent when New Zealand separated from Gondwana 1000000s of old ages ago ; it resulted in certain features being attained by different animate beings. Due to the deficiency of ground-dwelling marauders the native bird the Kiwi did n't germinate the usage of flight. Alternatively they used their ability to scamper for nutrient at dark when it was dark, off from the prising eyes of winging marauders.

Theories such as these have provided grounds in the evolutionary alterations in animate beings over many old ages. The grounds provided gives us an inside expression at what these animate beings were and how they adapted schemes to last in their home grounds.

## **Undertaking 2:**

**Through cognition and apprehension of this unit, together with independent research, compose about the followers:**

**Identify cardinal influencing factors which may impact the evolutionary procedures and discourse these in context with altering home grounds, climate alteration and human interaction/intervention. Supply clear illustrations of each**

**Relate treatments to modern evolutionary theory, and integrated independent research to place current stances on evolutionary theory**

In order for the animate beings to go on to germinate, there are cardinal factors which determine their patterned advance.

Isolation is one of these factors. This is where animate beings are separated in order to forestall reproduction with each other, hence forestalling their familial differences from rolling up. There are different types of Isolation which are sometimes caused by manmade constructions such as Bridges or H2O dikes, or it might be that they are separated by Rivers or Mountains. Due to environmental factors such as Continental impetus it, separated the species so their familial information is so different from one another that over a period of time, they have gone through that many alterations they become different species wholly and hence are unable to reproduce with one another. This signifier of speciation was highlighted by Charles Darwin when he was on the Galapagos Islands in 1835 where he deduced that a species separated from their ain species because of an environmental barrier can organize a wholly new species.

**( [hypertext transfer protocol: //www. pbs. org/wgbh/evolution/library/03/4/1\\_034\\_01. html](http://www.pbs.org/wgbh/evolution/library/03/4/1_034_01.html) )**

Gene flow is besides a factor. This is where an carnal species such as a Butterfly migrates from one population to another.

If the Insect flies from a xanthous population to a violet population, it finally mates with the opposite coloring material in its species and hence introduces its xanthous coloring cistrans to the new population. Mutant can besides be a cardinal factor which affects the evolutionary procedure. This is where the familial make-up of a species is defected and passed on to their progeny. This procedure can take to an terminal of a species. Climate alteration can besides be responsible for impacting evolutionary procedure of many animate beings. This is apparent as Global heating has caused utmost conditionss in parts of the universe. Birds are migrating earlier each twelvemonth as they move from the cold temperatures.

This affects the species as some of the stronger birds moves into other species home grounds and thrive of their nutrient supply. By the invasive species in their home ground, some Birds have to travel to other home grounds or face being wiped out.

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Global heating besides affects Bird species in other ways. This can be because of sea degree rise, drouths, deluging or terrible wildfires.

These planetary events forces birds to seek safety in other topographic points, which in bend affects other species niches. Direct human interaction

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with animate beings can impact their development patterned advance every bit good as their endurance. Farmers trades with Insects on a day-to-day footing. They use Insect repellent and or pesticides to kill of plagues that feed upon the husbandmans harvests.

Insects which survive theses onslaughts can do their familial information to be affected and mutated. When reproduction occurs this can do defects in their progeny. On the other side of this, by lasting pesticide onslaughts, it can do the Insects become tolerant of the toxicant and can do their offspring excessively become tolerant of it excessively. This creates a job for husbandmans as they have now indirectly created a tolerant Insect of the pesticides.

Unfortunately, human interactions with animate beings have decreased the figure of animate beings ' species dramatically in recent old ages. The high demand for material things such as leather merchandises, apparels and Ivory have become outstanding in the modern twenty-four hours. This has resulted in 1000000s of deceases via worlds such as poachers. Elephants are killed in their home grounds for their Ivory ivories which can convey a batch of money in today ' s market. The changeless demand of Whale castanets, Turtle Shells and Snake teguments have reduced the Numberss of these animals and affected the development of their species and damaged the addition of future coevals.

All these factors impacting the evolutionary procedure can be seen in the modern theories which are debated by scientists and life scientists likewise in today ' s environment. It is debated that all life today has evolved and

diverged from ascendants three billion old ages ago from the seas. This theory is supported by an accretion of grounds from scientific disciplines such as biological science, genetic sciences and excavated dodos. This grounds would back up that all animate beings are related to one another from common descent. Macroevolution is the term used as the larger alterations of development such as how craniate ' s evolved from those with fives. These animate beings evolved from aquatic environments to tellurian environments and had to larn to accommodate to the addition in O demands and the menace of possible marauders. This move was a dramatic alteration in the evolutionary patterned advance of animate beings and assist determine the animate being land everlastingly. Mention Datehypertext transfer protocol: //oceanofk. org/sharks/sharkAnatomy. html 01-05-2012hypertext transfer protocol: //www. kcc. org. nz/kiw 01-05-2012hypertext transfer protocol: //www. wildliferanching. com/content/nile-crocodile-crocodylus-niloticus 01-05-2012hypertext transfer protocol: //lingolex. com/ants. htm 01-05-2012

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