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# The Species of Turtles

Since our world consists of billions of animals, scientists had to develop a way to archive each into appropriate groups that emphasized their individual characteristics. Each organism is split initially into a kingdom, phylum, class, order, sub-order, family, genus and finally into a species. Through this long process humanity is able to catalog all living, and even extinct specimen, that have been discovered. Turtles are one of the longest living animals to inhabit our planet, and as such have been able to diversify into extraordinary quantities.

Turtles are grouped into the kingdom Animalia. This kingdom consists of all animals on the planet which are the most complex eukaryotes on our planet. The phylum of turtles is Chordata, or an animal with a backbone. This is not to be confused with vertebrates which are a sub-group of the phylum Chordata. All vertebrates are chordates, but not all chordates are necessarily vertebrates. There are subtle differences between the two, but the important aspect of this is that turtles are within the phylum Chordata (BSU). Within the shell of a turtle there is an interior skeleton. The ribs, spine, and breastplate of the turtle directly contact the shell and give turtles their bulky shape.

The following classification under which turtles fall is the class Reptilia. This class consists of all turtles, snakes, lizards and crocodiles indigenous to the Earth. Reptiles are cold-

blooded creatures that also have the ability to breathe air. They typically have scales to help them retain moisture and most lay eggs. They usually move towards land only to lay their eggs, but on occasion to bask in the sun's rays. Turtles fall into the order Testudines, which groups together all turtles and tortoises. Within the order, there are three sub-orders: Pleurodira, Cryptodira, and Amphichelydia. Pleurodira groups "side-neck turtles" who, when retracting their necks into their shells, must move it to one side. Cryptodira, as opposed to Pleurodira, is able to retract their necks directly under their spines. This sub-order classifies all other species of living turtles and tortoises. The final sub-order of turtle classification is Amphichelydia which groups together all extinct species. Most turtles today fall under the Cryptodira sub-order, turtles such as the Green sea turtle and the Red-Eared Slider. It accounts for all the freshwater turtles, snapping turtles, tortoises, soft-shelled turtles and sea turtles on Earth (BSU).

For the sake of not naming every family of turtles, the focus will now shift to sea turtles. There are two families of sea turtles: Cheloniidae and Dermochelyidae. Cheloniidae constitutes the group of sea turtles with scute-like plates forming their shells, for example, the Hawksbill sea turtle. Dermochelyidae is an odd family, as it only has one known species: the Leatherback sea turtle. This family's constituents have rough leather-like shells rather than scutes (BSU).

The genus and species of animals differs with each. In many cases, the genus will be the same, but the species will not. With sea turtles there are eight species that are generally accepted by science. The Loggerhead sea turtle (*Caretta caretta*) is one of the better known species to inhabit the planet. They are known for their massive skulls and brownish, reddish pigment of their shells. The Green sea turtle (*Chelonia mydas*) is known to live around the beaches of Hawaii. Its sister species, The Black sea turtle (*Chelonia mydas*), is sometimes debated upon. Some believe that it is an alternate species to the Green sea turtle, with its own genus, but others

believe it to be the same, although indigenous to different oceans. The Leatherback sea turtle (*Dermochelys coricea*) is the only species in the Dermochelyidae family, from where its genus is derived. The Flatback Sea turtle (*Natator depressus*), is found in Australian oceans and is the only specimen in the *Natator* genus. The Hawksbill Sea turtle (*Eretmochelys imbricate*), is exclusive to its genus as well. The Hawksbill is found in all oceans. It is still; however, one of the most critically endangered species of sea turtle on the planet. The Olive Ridley sea turtle (*Lepidochelys olivaces*) and Kemp's Ridley sea turtle (*Lepidochelys kempii*) both share the same genus and are very similar in both size and color (BSU). All species of sea turtles are beautiful, and although extremely plentiful in the past, they are now declining at a rapid rate. These eight remaining species are part of what may be the last of all sea turtles.

All animals on the planet are grouped into many divisions to specify their individual characteristics. Turtles, like all creatures, fall into the division of a kingdom, a phylum, a class, an order, sub-orders, a family, a genus, and finally a species. There is much diversity among all species and definitely within turtles. They must be classified to retain the integrity of biodiversity on the Earth.

Work Cited

BSU. "Reptile Classification Chart." Reptile Classification Chart. Ball State University, n.d. Web. 30 Nov. 2012. http://www.bsu.edu/eft/belize/p/libt/classchart.html