Snakes fall into three major categories Boas, Pythons and Colubrids. Boas, including Red Tail Boas and Argentine Boas, are medium to large non-venomous constricting snakes found in America, Africa, Europe and Asia. Pythons are large non-venomous snakes found in Africa, Asia and Australia and include Ball Pythons, Burmese Pythons. Colubrid is a broad term referring to two thirds of snake species including Milk Snakes, Corn Snakes, King Snakes, Garter Snakes and Vipers. Colubrids are found in the wild on every continent except Antarctica.

Boas and pythons have some similarities: they are constrictors, wrapping their bodies around prey and suffocating it. They both are considered primitive snakes with two lungs, while most other snakes only have one.

There are many differences between species too. Boas reach lengths of three to thirteen feet; pythons reach ten to over twenty feet depending on species. Boas give live birth while pythons lay eggs. Boas “smell” their prey by flicking their tongues in and out to catch scent particles from the air. Most species have temperature-sensitive scales and nerve endings around their mouths that sense the heat of nearby animals. Pythons have “pits” or holes along their mouths that sense the heat of animals.

Colubrids are characterized by their complete absence of hind limbs, left lung and some teeth. They have a row of large scales on their abdomens. Some colubrids lay eggs while some are live-bearers.

Most snakes are arboreal or semi-arboreal meaning they prefer a tall enclosure with lots of vines and objects to climb on. The ideal snake habitat is an aquarium with a screen top for ventilation or a custom-made cage. Substrate for the bottom of your enclosure can include paper towels, newspaper, butcher paper, terrarium liners, rabbit alfalfa food pellets or recycled paper products. Calcium sand is not a good choice because it can be ingested which may cause intestinal impaction. Wood shavings, walnut shells and sand are all inappropriate choices as these can be harmful if ingested, can carry parasites and
irritating dusts and oils. The enclosure should be cleaned regularly usually once weekly will suffice; with water and a mild soap. Your snake will also need a shelter or house for hiding. Artificial plants and decorations may be used to create a more natural looking habitat.

Different species of snakes will require different humidity levels measured with a hygrometer. It is very important to research your snake’s specific humidity requirements. Improper humidity levels may lead to a variety of health issues including respiratory, eye, and skin infections, mouth rot, regurgitation and difficulty shedding. A shallow dish with clean water should be offered at all times. A warm water soak once weekly is recommended to keep them hydrated and help him/her to defecate.

A heat lamp, ceramic heat emitter is important to maintain the appropriate temperature. The ideal temperature for a snake varies based on the individual species and usually ranges from 75-90 degrees Fahrenheit with one side being slightly cooler (about 5 degrees) than the other. This difference in temperature allows your snake to cool off and avoid overheating. These temperatures are monitored with two thermometers, one on each side of the cage. Your snake should have 12 hours of daylight (white light) and 12 hours of darkness for its natural biorhythms. A timer purchased from a pet supply store or hardware store can be utilized to maintain this twelve hour light cycle. At night, the temperature in the enclosure should drop slightly, about 10 degrees, as it would in their natural habitat. Night temperatures should also be closely monitored and ceramic heat emitters, red, blue or purple reptile night bulbs can aid in increasing night temperatures if needed. Always use reptile specific heat bulbs which have modifications that benefit the reptile and helps stimulates eating.

An ultraviolet light is beneficial for the health of snakes. This reptile specific bulb produces UVA and UVB rays and is purchased from your local pet supply store. The UVB rays are important for the natural production of vitamin D which helps the snake absorb calcium from its diet. Without the UV bulb your snake cannot properly absorb calcium which leads to metabolic bone disease. UV bulbs for reptiles come in two different forms the compact (coil) bulb and the linear fluorescent tube. While there are many companies that produce UV bulbs, Zoo Med and Zilla are recommended. Follow manufacturer recommendations to determine the type of UV bulb you purchase, and the distance to place the bulb from your snake. All UV bulbs need to be changed every 6-12 months based on manufacturer’s recommendations. After that time, even if the bulb still turns on it is not producing the vital rays your snake needs for calcium metabolism. Plastic and glass windows are designed to block UVB rays so keeping the tank by a window will not provide essential UVB rays. It is ideal to provide monitored time outside on a warm day in an escape proof enclosure with access to shelter. Natural sunlight is the best source of essential UV rays.

Heat rocks should not be used as they can cause burns since reptiles do not sense a “localized” temperature. Heating pads under the tank may be used with supervision. Place your hand on the area of the tank with the heating pad; if it is too hot for your hand to rest on for long periods of time then it is too hot for your snake.
Snakes are carnivores and their diets usually consist of small mammals. Some species such as garter snakes can eat fish or crickets. The type of prey for your snake will depend on the circumference of your snake. Small snakes can eat small mice, while larger snakes can eat rats and other larger mammals. It is recommended that your snake be fed frozen prey. Live prey can attack your snake causing bite wounds, trauma and secondary infections. Frozen mammals are purchased from your local pet supply store. To thaw, soak them in warm water for twenty minutes until the mammal is warm. Do not place them in the microwave as this can cause hot spots on the prey which can burn your snake. Your snake should be removed from its enclosure and carefully fed so it does not learn to associate your hands with food and attempt to bite you when you reach into the enclosure. The frequency of feeding your snake will depend on the age of your snake and size of prey. Younger snakes that are eating smaller amounts will need to be fed more frequently (every week or so) while older snakes eating larger prey can go several weeks between meals.

Do not handle your snake for at least twenty-four to forty-eight hours after feeding because handling will likely cause your snake to regurgitate its meal. Regurgitation is when your snake forces its meal back out of its mouth before it has reached the stomach. Snakes feel more vulnerable after eating so if handled they will regurgitate to escape faster. This can be traumatic for your snake and will make it difficult for you to get your snake to eat again. Special care will need to be taken for your snake to eat again.

Occasionally you will notice that your snake’s eyes look glassy and the overall color of your snake will get dull. This occurs when your snake is getting ready to shed its skin. Do not attempt to feed your snake during this process as it most likely will not eat. Handling your snake is also not recommended as shedding snakes can be more aggressive. The frequency in which your snake sheds will vary depending on the rate of growth of your snake.

An annual examination with a qualified reptile veterinarian is very important to ensure your snake is in good health. Snakes are very good at hiding when they are sick this is an instinctive behavior. It is very important to see a qualified veterinarian as soon as you notice your snake not acting normal. Common diseases affecting snakes can include regurgitation, abscesses, mouth rot, septicemia, respiratory disease, eye infections, retained eye caps, viral infections, parasites and cancer.