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Axolotls belong to the amphibian group and originate from the high-altitude freshwater lakes of Mexico. Sadly, they are now included on the CITES endangered species list. The incredible regenerative abilities and large robust embryos of the axolotl have led to its widespread use in laboratory research.

The axolotl exhibits neotony in which normal metamorphosis does not occur and instead the larval form of the animal is maintained, this means that both the gills and fins are retained and other characteristics such as protruding eyes do not develop. Whilst the axolotl has rudimentary lungs, breathing occurs via the gills and to a lesser extent, the skin. Despite this, the axolotl grows larger than most larval forms of salamander and reaches sexual maturity. In rare cases axolotls can spontaneously metamorphosise.

Axolotls have small, cone like teeth which they use to manoeuvre food into the mouth. They are poikilothermic, meaning their body temperature fluctuates with that of the environment.

flow as this can cause severe stress in axolotls. It is also not advised to keep plants in the tank as they will be readily and rapidly destroyed. Over-filtration is also a potential cause of stress and filtration must therefore be controlled. Care should be taken to keep the tank in a quiet, vibration free area.

The optimum environmental temperature for axolotls is 16-18°C and should never exceed 24°C.

The ideal water pH is 7.4-7.6. Chlorine, found in tap water, is harmful to axolotls and so either a de-chlorinator must be used, or the water must be left to stand for 24 hours before adding it to the tank, to allow the chlorine to diffuse out of the water. If you live in an area in which chloramines are added to the water, then a de-chlorinator is essential. 10-20% of the water should be changed every week although this can be altered depending on the filter system of the tank and results of water quality testing.

Various substrates can be used for the bottom of the tank, however fine aquarium sand is the best choice as axolotls can occasionally eat gravel which can cause a fatalehn