



Leopard Geckos

About Leopard Geckos



- ▶ Range and Habitat: Leopard geckos are lizards native to Pakistan, India, Afghanistan, Iraq, and Iran where the terrain is dry and rocky.
- ▶ Leopard geckos are mainly nocturnal, spending the daytime under rocks or in burrows
- ▶ Leopard Geckos are one of the most popular lizards in the pet trade since the 1980s.

Leopard Geckos as Pets

- ▶ Leopard geckos are hardy, easy to maintain, require little space, and have long life spans which make them a perfect companion for individuals and families
- ▶ Leopard geckos are the largest species of gecko with adults reaching a max length of 8-11 inches
- ▶ Leopard geckos can live to be 20 years old or older



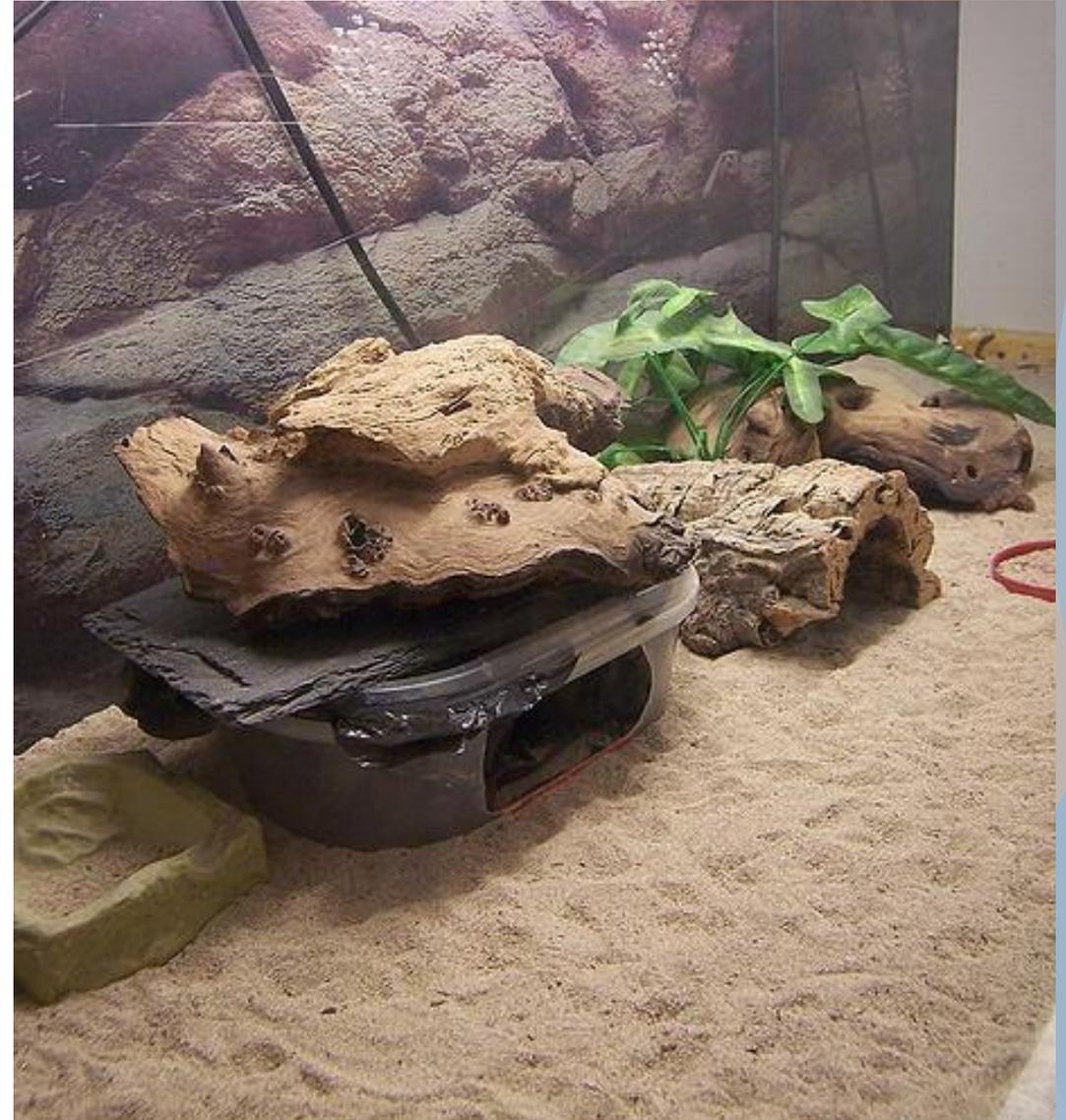
Food And Diet

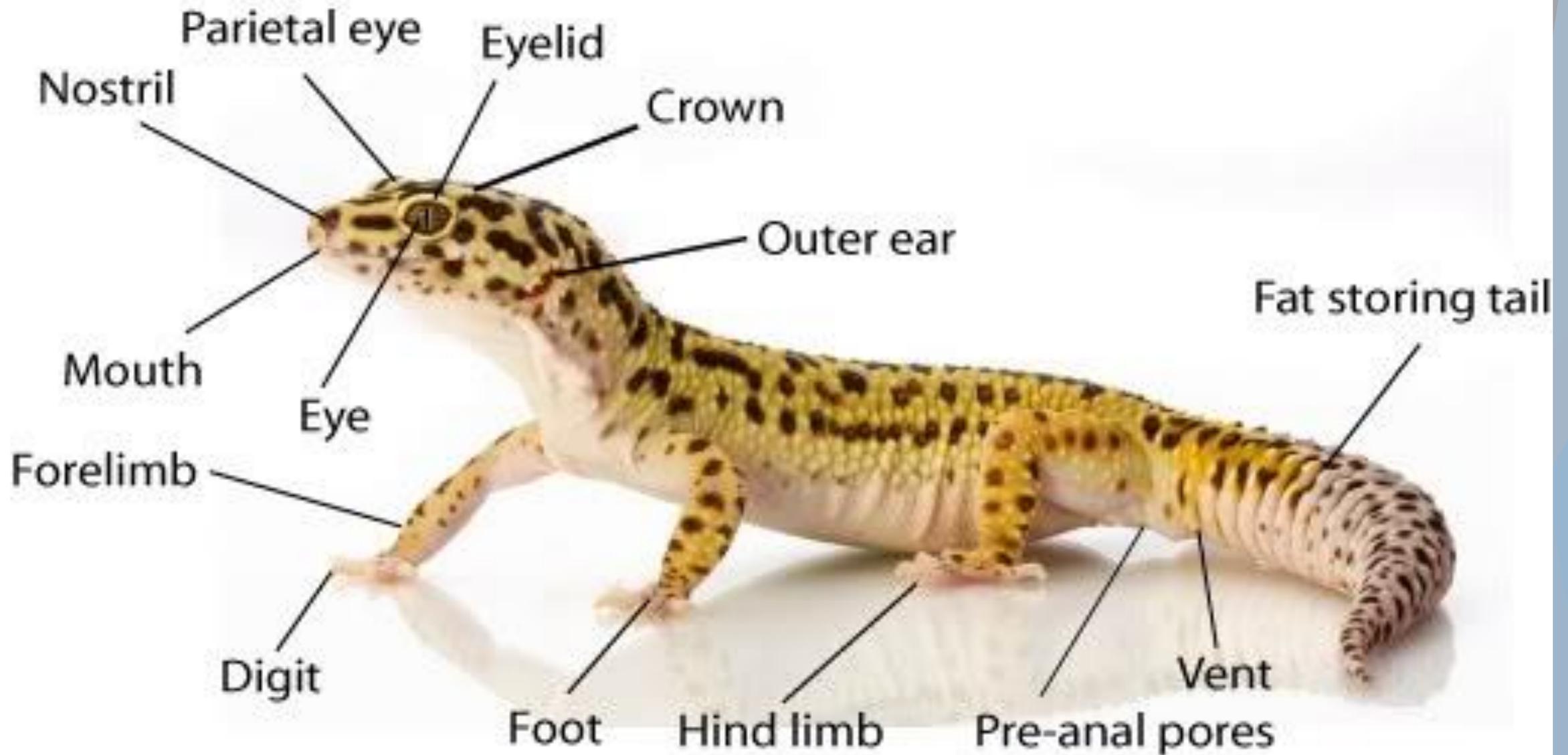
- ▶ Food: Leopard Geckos are mainly carnivorous Leopard geckos eat primarily insects. They eat spiders, scorpions, centipedes, and beetles. In captivity, their diet mainly consists of:
 - ▶ Crickets
 - ▶ Mealworms
 - ▶ Super-worms
 - ▶ Wax worms
- ▶ Leopard gecko needs water constantly so a dish with water in the cage is needed at all times
- ▶ Sometimes a calcium supplement is needed for growing geckos



Cage Care

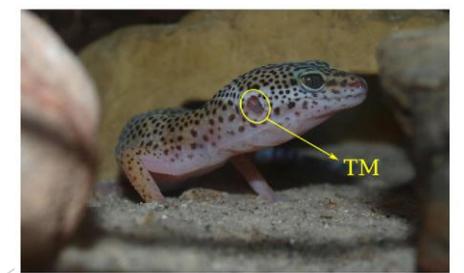
- ▶ A leopard gecko habitat needs:
- ▶ An terrarium with a screen top. The tank size should be about 10 gallons per gecko
- ▶ A lamp on one side of the tank for light during the day and heat
- ▶ A hide box. Multiple geckos need multiple hide boxes
- ▶ A water dish, and food bowl
- ▶ Substrate for the bottom of the cage
- ▶ Any additional decorations you want for the habitat





Appearance

- ▶ Leopard geckos are members of the sub-family *Eublepharinae*, or the eye-lidded geckos. It is not uncommon for geckos to lack eyelids, but the leopard gecko has eyelids which are movable. This allows them to blink and close their eyes.
- ▶ Unlike other geckos, leopard geckos lack adhesive lamella (sticky pads on their feet) and have little claws instead. Leopard geckos lack toe pads, which may be useful for climbing. Instead they have small claws at the ends of each of their toes.
- ▶ Leopard gecko ears have a unique auditory system: when you shine light through one ear, it shines through to the other ear.



(a)



(b)



(c)

Leopard Gecko Gender

- ▶ Gender: Males and females are similar in appearance.
- ▶ Males generally are stouter with a slightly broader head and thicker neck compared to females.
- ▶ Males have a V shaped row of pre-anal pores which produce a waxy secretion.
- ▶ Males also have hemi penile swelling at the base of the tail.

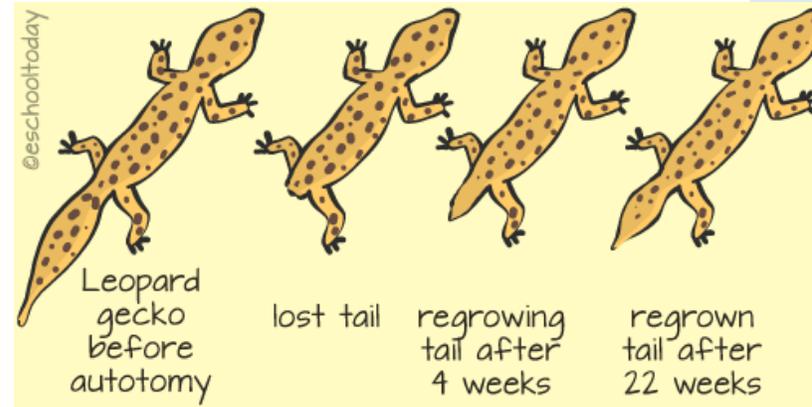


Male

Female

Regeneration/Regrowth

- ▶ If a Leopard gecko loses his tail it will grow back. Leopard Geckos can store fat in their tails and can release their tail to distract a predator or escape from a predator's grasp. The release process may involve the following:
- ▶ The tail releases at a vertebra crack and the surrounding muscles easily and neatly separate.
- ▶ Muscles then clamp the surrounding arteries to prevent significant blood loss.
- ▶ A newly lost tail will still twitch, providing a distraction for the gecko to escape.
- ▶ A new tail is likely to regrow, but this is energy expensive and the loss forces the gecko to abandon stored energy.



That Gecko is one Cool “Cat”

- ▶ Leopard geckos are named after leopards because the adult geckos have spots. These spots, along with their coloration, allow them to blend in with their native environment
- ▶ Leopard geckos have better vision than any other lizard studied. Their vision is similar to that of a cat.
- ▶ Leopard geckos will ‘bark’, ‘click’ and ‘chirp’. Making them one of the only lizards to make vocal noises
- ▶ Leopard geckos shed their skin like snakes, but eat it afterwards.



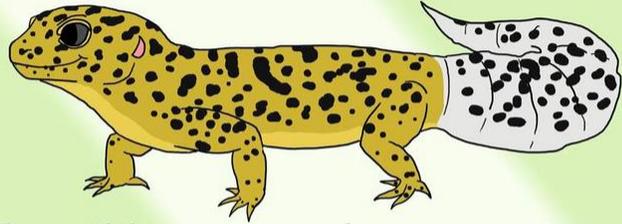
Leopard Gecko Morphs



- ▶ Leopard geckos have been bred with over 100 different types of Morphs
 - ▶ A morph is a difference in color, size, or other genetics
- ▶ The most popular morphs are geckos with “leopard spots”

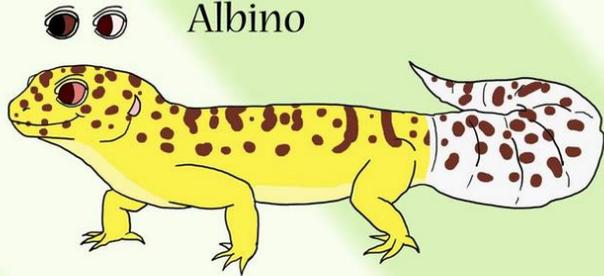


Normal



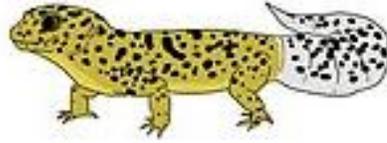
- The wild type morph
- Yellow/brown
 - Black spots
 - Lighter color in tail

Albino

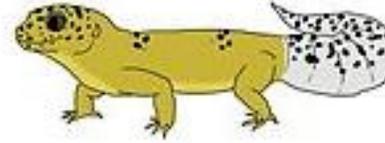


- Yellow base color with brown, beige, or pink spots
- Eyes are red, brown, pink, or white in color

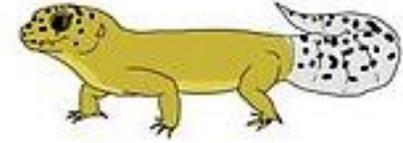
Normal



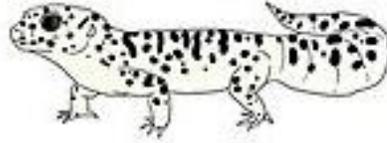
Hypo



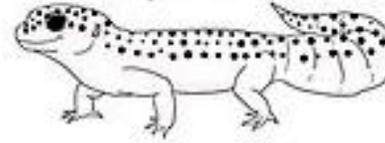
Super hypo



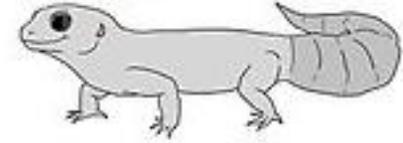
Mack Snow



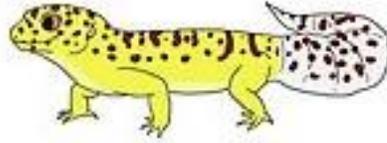
Super Snow



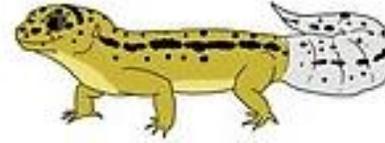
Blizzard



Albino

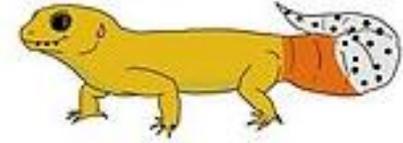


Stripe

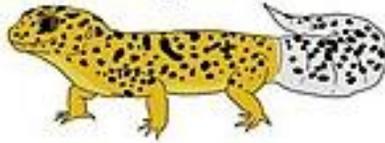


SHTCTB

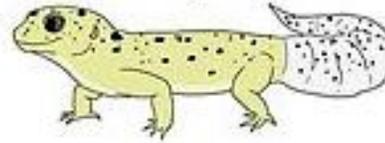
Super Hypo Tangerine Carrot tail Baldy



Tangerine



Enigma



Murphy's Patternless / leucistic



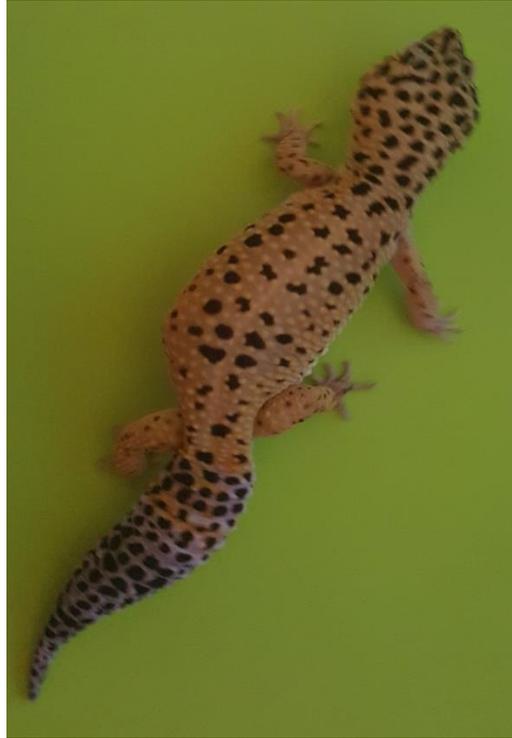
Leopard Geckos: Genotypes and Phenotypes

Meet

Rosie

and

Albie



Normal Leopard Geckos are a dull yellow color with black spots.



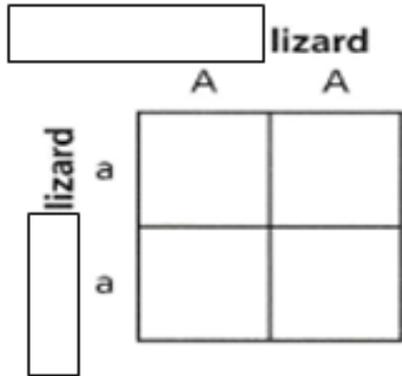
Albino Leopard Geckos lack black pigment in their skin so they have no spots.

Whether a gecko is a Normal Leopard or Albino Leopard is inherited.
The **allele** for albino coloring is **recessive**.

- ▶ **Leopard gecko** breeding often requires a basic, and in some cases advanced, understanding of genetics. When we understand genetics, we not only understand why a gecko may look the way it does, but we can also predict what it will look like before it even hatches.
- ▶ Let's take an example of an albino leopard gecko and walk through the outcome of pairing an **albino leopard gecko** with a **normal leopard gecko**.
- ▶ In order to determine what you will get when you cross an albino leopard gecko with a normal leopard gecko, it helps to create a Punnett square.
- ▶ A Punnett square is a diagram that is used to predict the outcome of combining various paternal and maternal alleles.
- ▶ The **albino trait is made up of recessive alleles**, which means that the trait is only expressed in the *homozygous state*. In our Punnett square we will designate the **albino trait as (aa)**, each allele for the albino trait being represented by an "a".
- ▶ The **normal trait is the dominant trait**. We'll say its **genotype is (AA)**, each allele represented by an "A".

	A	a
A	AA	Aa
a	Aa	aa

The punnett square below shows a cross between two geckos.



**Key: A = Normal Leopard
a = Albino Leopard**

1. Is the male gecko Normal or Albino in appearance? _____ (fill in the punnett square)
2. Is the female gecko Normal or Albino in appearance? _____ (fill in the punnett square)
3. The offspring of this pairing will be _____ because _____

4. If two of the offspring were bred together, what would be the expected ratio of the Normal Leopard to Albino Leopard geckos?

- a. Create a Punnet Square for this pairing
- b. What is the ratio? _____ normal :: _____ albino

Mrs. Smith's other Leopard Geckos

Leona



Caleb

