

GECKODAILY CLASSROOM RESOURCES · WORKSHEET

Leopard Gecko - Adaptations & Physiology

Eublepharis macularius

Name: _____ Date: _____

Instructions: Answer each question in complete sentences, using the matching Leopard Gecko Species Fact Sheet as your reference. An answer key follows on the last page.

1. Give the full scientific (binomial) name of the leopard gecko, and identify which part is the genus and which is the species epithet.
2. Leopard geckos belong to the family Eublepharidae, which is unusual among geckos for one physical feature. What is it, and why is it unusual?
3. Explain temperature-dependent sex determination (TSD) in your own words, and state how incubation temperature affects hatchling sex in this species.
4. What is the primary function of the leopard gecko's tail besides balance?
5. Define autotomy and describe what happens after a leopard gecko autotomises its tail.
6. Why do leopard geckos lack the adhesive toe pads seen in many other gecko species? What do they have instead, and what does this suggest about their lifestyle?
7. What is the leopard gecko's current IUCN Red List conservation status?

GECKODAILY CLASSROOM RESOURCES · ANSWER KEY

Leopard Gecko - Adaptations & Physiology

1. Give the full scientific (binomial) name of the leopard gecko, and identify which part is the genus and which is the species epithet.

Eublepharis macularius - 'Eublepharis' is the genus, 'macularius' is the species epithet.

2. Leopard geckos belong to the family Eublepharidae, which is unusual among geckos for one physical feature. What is it, and why is it unusual?

Movable eyelids. Most other gecko families instead have a fixed, transparent scale over the eye (which they lick clean) rather than an eyelid they can close.

3. Explain temperature-dependent sex determination (TSD) in your own words, and state how incubation temperature affects hatchling sex in this species.

TSD is a system where the temperature eggs are incubated at - not sex chromosomes alone - influences whether offspring develop as male or female. In leopard geckos, warmer incubation temperatures tend to produce more males.

4. What is the primary function of the leopard gecko's tail besides balance?

Fat storage - a well-fed gecko has a thick tail it can draw on as an energy reserve during food shortages.

5. Define autotomy and describe what happens after a leopard gecko autotomises its tail.

Autotomy is the voluntary detachment of a body part (here, the tail) usually to escape a predator. The tail detaches at a fracture plane and a new tail regrows, though it never fully matches the original in shape or pattern.

6. Why do leopard geckos lack the adhesive toe pads seen in many other gecko species? What do they have instead, and what does this suggest about their lifestyle?

They lack setae-covered climbing pads because they are ground-dwelling rather than climbing/arboreal. They have small claws suited to walking on rock and sand instead.

7. What is the leopard gecko's current IUCN Red List conservation status?

Least Concern.