frog external anatomy answer Tutorial

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Understanding the external anatomy of a frog is fundamental for students, educators, and biology enthusiasts interested in amphibian biology. Frogs are fascinating creatures with distinct physical features that aid in their survival, movement, and reproduction. This article provides a comprehensive overview of frog external anatomy, detailing the various external parts, their functions, and significance. Whether you're preparing for an exam, conducting research, or simply fascinated by frogs, this guide offers valuable insights into the external features of these remarkable amphibians.

Introduction to Frog External Anatomy

Frogs are amphibians belonging to the order Anura, characterized by their tailless bodies, powerful hind limbs, and smooth, moist skin. Their external anatomy is highly specialized to facilitate jumping, swimming, breathing, and reproduction. Recognizing and understanding these external features is essential for identifying different frog species, studying their behavior, and understanding their adaptation strategies.

Major External Parts of a Frog

The external anatomy of a frog can be divided into several key regions and features. These include the head, limbs, skin, and various external organs that serve specific functions.

Head and Facial Features

The head of a frog houses vital organs such as the eyes, tympanic membrane, and mouth. The external features of the head include:

- **Eyes:** Located on the top of the head, frog eyes are large and prominent, providing a wide field of vision essential for spotting prey and predators.
- **Tympanic Membrane:** Also known as the eardrum, this circular membrane is located behind the eyes and is used for hearing.
- **Nostrils:** Situated on the upper part of the snout, the nostrils allow frogs to breathe while submerged and assist in scent detection.
- **Mouth:** Extending across the front of the head, the mouth is used for feeding and vocalizations.

Body and Skin

The frog's body is streamlined and muscular, covered by smooth, moist skin that aids in respiration and camouflage.

- **Skin:** Frogs have permeable skin that can absorb water and gases, making external features like coloration and texture important for survival.
- **Ventral Surface:** The underside of the frog, often lighter in color and sometimes with markings.

Limb Anatomy

Frog limbs are highly specialized for jumping and swimming.

Forelimbs

- Generally shorter than hind limbs.
- Consist of the upper arm (humerus), forearm (radius and ulna), and hand (with fingers).
- The four fingers of the front limbs are webbed or partially webbed, aiding in swimming and grasping.

Hind Limbs

- Significantly longer and stronger than forelimbs.
- Comprise the thigh (femur), shank (tibia and fibula), and foot.
- The hind feet have webbed toes, which assist in swimming and jumping.

External Organs and Structures

Various external structures contribute to a frog's survival and reproductive success.

- **Webbed Feet:** Enhance swimming efficiency.
- **Claws or Nails:** Located at the tips of fingers and toes for climbing and gripping.
- **Coloration and Patterns:** Serve as camouflage or warning to predators.

Detailed Explanation of External Features

Understanding the specific external features of a frog involves examining each part's structure and

function in detail.

Eyes

Frog eyes are large, bulging, and positioned on the top of the head. They are adapted for excellent vision in low light conditions and provide a wide field of view. The pupils can be horizontal, vertical, or round, depending on the species.

Tympanic Membrane

This membrane acts as the frog's eardrum and is located just behind the eyes. It transmits sound vibrations from the environment to the inner ear, essential for communication and detecting predators.

Nostrils

Frog nostrils are small openings on the upper part of the snout. They remain open even when the frog is submerged, allowing it to breathe air and detect scents.

Mouth and Tongue

Frogs have a wide mouth with a sticky, muscular tongue that can extend rapidly to catch prey like insects. The mouth also plays a role in vocalization, especially in males during mating calls.

Skin and Coloration

The frog's skin is smooth, moist, and often brightly colored or patterned. These features serve as camouflage or warning signals to predators. The skin also plays a crucial role in respiration, allowing gas exchange directly with the environment.

Limbs

- Forelimbs: Short and sturdy, used for supporting the body and during landing.
- Hind Limbs: Long, powerful, and adapted for jumping and swimming. The webbed toes increase surface area for propulsion in water.

External Reproductive Structures

In males, the external reproductive organ is the nuptial pad on the thumb, aiding in grasping females during mating. Females have a cloaca opening near the base of the tail, which is used for excretion

and reproduction.

Functions of External Features

Each external feature of a frog has specific functions vital for its survival:

- **Eyes:** Detect movement, prey, and predators.
- **Tympanic membrane:** Hearing and communication.
- **Nostrils:** Breathing and smell detection.
- **Skin:** Respiration, camouflage, and protection.
- **Limbs:** Jumping, swimming, climbing, and supporting movement.
- **Coloration:** Camouflage or warning to predators.

Summary of Key External Features

| External Feature | Description | Function |

|---|---|---|

| Eyes | Large, bulging, on top of head | Vision, predator detection |

| Tympanic membrane | Circular membrane behind eyes | Hearing |

| Nostrils | Openings on snout | Breathing, scent detection |

| Mouth | Wide with sticky tongue | Feeding, vocalization |

| Skin | Moist, smooth, colored | Respiration, camouflage |

| Forelimbs | Short, with fingers | Support, landing |

| Hind limbs | Long, muscular, webbed toes | Jumping, swimming |

| Webbed feet | Webbing between toes | Swimming efficiency |

| Claws/Nails | At finger and toe tips | Climbing, gripping |

Conclusion

The external anatomy of a frog is a marvel of evolutionary adaptation, enabling it to thrive in diverse

environments. From its powerful hind limbs that facilitate jumping and swimming to its permeable skin that aids in respiration, each external feature plays a pivotal role in the frog?s life cycle. Recognizing these features not only helps in identifying different frog species but also provides insight into how frogs survive, reproduce, and adapt to their habitats. Whether for academic purposes or personal curiosity, a thorough understanding of frog external anatomy offers a window into the fascinating world of amphibians.

Keywords: frog external anatomy, frog body parts, frog features, frog biology, amphibian external features, frog anatomy diagram, frog head, frog limbs, frog skin, frog eyes

Frog External Anatomy Answer: A Comprehensive Guide to Understanding Frog External Features

Frogs are fascinating amphibians that have captured human curiosity for centuries. Their unique external anatomy not only reflects their adaptation to both aquatic and terrestrial environments but also provides vital clues about their behavior, physiology, and survival strategies. Whether you are a biology student, a nature enthusiast, or simply curious about these remarkable creatures, understanding the external anatomy of frogs is essential. In this guide, we will delve into the detailed structure of a frog?s external features, highlighting key parts, their functions, and significance.

Introduction to Frog External Anatomy

The external anatomy of a frog encompasses all visible parts of its body that are crucial for movement, feeding, reproduction, and sensory perception. Frogs exhibit a streamlined body with distinct features that enable them to thrive in diverse habitats. Recognizing these parts provides insight into how frogs interact with their environment and carry out vital life processes.

Key External Features of a Frog

The Head Region

The head of a frog is a compact structure that houses several important sensory organs and features:

- Eyes: Positioned on the top of the head, frog eyes are large and prominent, providing a wide field of vision. They are adapted for detecting movement and helping the frog judge distances during jumps.
- Eyelids: Frogs have both upper and lower eyelids that protect the eyes from debris and injury.
- Nostrils (Nares): Located just above the mouth, these small openings allow frogs to breathe while submerged and help in sniffing their environment.
- Mouth: The wide, muscular mouth is used for feeding, vocalization, and communication.

The Body and Dorsal Surface

The dorsal (top) side of a frog?s body is typically smooth and moist, aiding in cutaneous respiration (breathing through the skin). The key features include:

- Dorsal Skin: Often brightly colored or patterned, providing camouflage or warning signals.
- Sternum (Breastbone): Located underneath, it provides support for the front limbs.

The Ventral Surface

The underside of the frog is called the ventral surface, which includes:

- Ventral Skin: Usually lighter in color, often smooth or slightly granular.
- Throat and Belly: Contains vital organs and is often involved in respiration and vocalization.

Limbs and Their External Features

Frog limbs are highly specialized for jumping, swimming, and climbing. They are divided into forelimbs and hindlimbs.

Forelimbs

- Shoulder Girdle: Connects the forelimb to the body.
- Upper Arm (Humerus): The segment connecting the shoulder to the elbow.
- Forearm (Radius and Ulna): The middle part of the limb.
- Hand (Manus): Comprising four fingers, with the third finger often being longer and more dexterous.

Hindlimbs

- Thigh (Femur): The upper part of the hind limb, longer and stronger than forelimbs.
- Lower Leg (Tibia and Fibula): Support for jumping and swimming.
- Foot (Pes): Has five toes with webbed digits for swimming and leaping.

External Reproductive and Other Features

- Mucous Glands: Located on the skin, these produce mucus to keep the skin moist.
- Coloration and Patterns: Serve as camouflage or warning signals.
- Vocal Sacs (in males): Pouches that inflate during croaking to amplify sound.
- Claws: Small, hidden at the tips of fingers and toes, aiding in climbing.

Functionality and Adaptation of External Features

Understanding the external features of frogs helps explain their behavioral adaptations:

- Eyes and Vision: Large eyes provide excellent night vision and predator detection.
- Nostrils: Allow breathing while the frog remains submerged.
- Limbs: Long hind legs enable powerful leaps, while webbed feet facilitate efficient swimming.
- Skin: Moist and permeable, it aids in respiration and camouflage.
- Vocal Sacs (in males): Enhance vocalization during mating calls, aiding in attracting mates.

Significance of External Anatomy in Identification

The external features are crucial for distinguishing frog species, as coloration, size, limb length, and patterning vary widely among species. For example:

- Brightly colored frogs often exhibit toxicity.
- Webbed feet indicate aquatic habits.
- Size and limb proportion help determine whether a frog is adapted for jumping or climbing.

Summary of Key External Frog Features

| Part | Description | Function |

|---|---|---|

| Eyes | Large, prominent, on top of head | Vision, predator detection |

| Nostrils (Nares) | Small openings above mouth | Breathing, sensing environment |

| Mouth | Wide opening with muscular structure | Feeding, vocalization |

| Forelimbs | Shorter, used for grasping and support | Climbing, holding, helping in landing |

| Hindlimbs | Long and powerful for jumping and swimming | Locomotion (jumping, swimming) |

| Webbed Feet | Toes connected by webbing | Swimming efficiency |

| Skin | Moist, smooth or granular, often colorful | Respiration, camouflage, moisture retention |

| Vocal Sacs | Pouches in males used during croaking | Sound amplification for mating calls |

Conclusion

The external anatomy of a frog is a marvel of evolutionary adaptation, designed to optimize survival in both aquatic and terrestrial environments. From their large, alert eyes to their powerful hind limbs, every external feature plays a vital role in their lifecycle. Recognizing and understanding these features not only aids in species identification but also enriches our appreciation of frogs as resilient and fascinating creatures. Whether you're studying biology, observing frogs in nature, or engaging in conservation efforts, a thorough grasp of frog external anatomy is fundamental.

In summary, the external anatomy of frogs encompasses a variety of specialized parts?eyes, nostrils, mouth, limbs, skin, and vocal sacs?that work together to facilitate their unique lifestyle. Appreciating these features provides valuable insights into their behavior, ecology, and evolutionary success.

QuestionAnswer What are the main external parts of a frog's body? The main external parts of a frog include the head, eyes, tympanic membrane (eardrum), forelimbs, hind limbs, webbed feet, and the skin covering its body. What is the function of the frog's tympanic membrane? The tympanic membrane allows frogs to hear and detect vibrations in the environment, functioning as an external eardrum. Where are the frog?s eyes located and what is their purpose? The frog's eyes are located on the top of the head, providing a wide field of vision to detect predators and prey. What are the external features of a frog's limbs? Frogs have forelimbs with four fingers and hind limbs with five toes, often webbed to aid in swimming. How does the skin of a frog assist with its external anatomy functions? Frog skin is moist and permeable, helping with respiration, moisture absorption, and camouflage. What is the function of the frog's webbed feet? Webbed feet enhance swimming efficiency by increasing surface area, allowing frogs to move swiftly through water. What are the external reproductive features of a male frog? Male frogs typically have vocal sacs used to produce calls and thumb pads on their forelimbs to grasp females during mating. How can you identify a frog's external nostrils? Frog nostrils are small openings located on the snout, allowing them to breathe while submerged or partially submerged. Why is the frog's skin considered an important part of its external anatomy? Frog skin is vital for respiration, hydration, and protection, playing a key role in their survival and interaction with the environment.

Related keywords: frog external anatomy, frog body parts, frog external features, frog anatomy

diagram, frog external structure, frog external organs, frog external characteristics, frog external morphology, frog external anatomy quiz, frog external anatomy labels

frog dissection external anatomy answers

Understanding Frog Dissection External Anatomy Answers: A Comprehensive Guide

Frog dissection external anatomy answers are essential for students and educators aiming to understand the physical structure of frogs, which serve as vital models for biological and anatomical studies. By examining the external features, learners can identify key organs, muscles, and body parts that contribute to the frog's survival and movement. This guide provides an in-depth overview of frog external anatomy, complete with detailed descriptions, diagrams, and answers to common questions encountered during dissection activities.

Introduction to Frog External Anatomy

Frogs are amphibians with a unique external anatomy adapted for both aquatic and terrestrial environments. Their external features include limbs, skin, eyes, and mouthparts, which work together to facilitate movement, respiration, and sensory perception. Understanding these features is critical for students performing dissections or studying frog biology.

Key External Features of a Frog

Head and Facial Features

- **Eyes:** Located on the top of the head, frogs have large, bulging eyes that provide a wide field of view. The eyelids protect the eyes, while the nictitating membrane acts as a transparent shield during underwater activities.
- **Ears (tympanic membranes):** Circular membranes located behind the eyes, serving as the external eardrum for detecting sound vibrations.
- **Snout and Mouth:** The elongated mouth extends across the front of the face. The upper jaw contains the maxillary teeth, and the tongue is attached at the front of the mouth.

Body and Trunk

- **Skin:** Smooth, moist, and permeable, aiding in respiration and moisture absorption. The skin often has coloration and patterns for camouflage.
- **Ventral Surface:** The underside of the frog, including the belly and thighs, often lighter in color.

Limbs and Appendages

- **Forelimbs:** Shorter limbs used for supporting the body and assisting in movement and climbing.
- **Hindlimbs:** Long, powerful limbs adapted for jumping and swimming. The hind legs are typically much longer than the forelimbs.
- **Webbed Feet:** The toes of the hind limbs are webbed to aid in swimming.

External Anatomy Answers: Detailed Breakdown

1. Frog's Head and Facial Structures

During dissection, identifying the external features of the head is crucial. The answers to common questions include:

- **Where are the eyes located?** The eyes are situated on the top of the head, allowing the frog to see in multiple directions without moving the head.
- **What are the tympanic membranes?** These are circular, translucent membranes located just behind each eye, functioning as external eardrums.
- **How can you differentiate between the upper and lower jaw?** The upper jaw contains maxillary and vomerine teeth, while the lower jaw forms the mandible.

2. External Features of the Body

Understanding the external anatomy of the frog's body involves recognizing the skin and the body contours:

- **What is the purpose of frog skin?** It aids in respiration, moisture absorption, and camouflage. The skin also produces toxins as a defense mechanism.
- **How to identify the cloaca?** The cloaca is located near the posterior end of the ventral surface, serving as the common exit for the digestive, excretory, and reproductive systems.

3. Limbs and Movement Adaptations

Limbs are vital external features that facilitate movement:

- **What are the main differences between forelimbs and hindlimbs?** Forelimbs are shorter and primarily assist in support and minor movements, while hindlimbs are longer, stronger, and specialized for jumping and swimming.
- **How can you identify webbed toes?** The toes on the hind limbs are connected by thin, flexible skin, forming webbing which enhances swimming efficiency.

Diagrams and Labeling for External Anatomy

Visual aids are invaluable for understanding frog external features. Diagrams typically label the following parts:

- Eyes
- Tympanic membrane
- Nostrils
- Mouth
- Forelimb
- Hindlimb
- Webbed toes
- Ventral surface (belly)
- Cloaca

Using labeled diagrams during dissection helps students confirm the external features and answer questions related to frog anatomy accurately.

Common Questions and Answers about Frog External Anatomy

Q1: How do you identify the frog's gender based on external features?

A1: Typically, male frogs have a vocal sac?a pouch located near the mouth?that inflates during calls. Additionally, males often have thumb pads on their front limbs, used during mating. Females generally lack these features.

Q2: Where are the lymph sacs located on a frog?

A2: Lymph sacs are located under the skin, primarily around the shoulders and hips, but they are more internal and not easily seen externally. External features like skin color may sometimes hint at their location.

Q3: What external features help frogs jump effectively?

A3: The long, powerful hind limbs with webbed toes provide the necessary leverage and thrust for jumping. The strong thigh muscles also contribute significantly to their ability to leap.

Q4: How do external features aid in respiration?

A4: Frogs breathe through their skin and the lining of their mouth, both of which are external features. Moist skin with a rich blood supply allows for cutaneous respiration, supplementing lung breathing.

Importance of External Anatomy in Dissection and Learning

Understanding the external anatomy of frogs is fundamental for grasping their physiology and adaptations. During dissection, external features serve as landmarks for exploring internal organs and systems. Accurate identification and comprehension of external features enable students to:

- Correlate external features with internal structures
- Understand functional adaptations
- Develop observational and dissection skills
- Answer exam questions confidently

Tips for a Successful Frog Dissection External Anatomy Study

- **Prepare beforehand:** Review diagrams and labels of frog external anatomy.
- **Handle carefully:** Use dissecting tools gently to avoid damaging delicate external features.
- **Observe thoroughly:** Take notes and make sketches of external features during the dissection.
- **Use external features as guides:** Locate internal organs based on external landmarks for a comprehensive understanding.
- **Review answers to common questions:** Reinforce knowledge by testing yourself with typical external anatomy questions.

Conclusion

Mastering the external anatomy of frogs through dissection enhances understanding of their biology, adaptations, and evolutionary significance. "Frog dissection external anatomy answers" provide clarity and confidence during learning activities, helping students connect external features with internal functions. By studying the head, body, limbs, and skin features in detail, learners gain a holistic view of frog anatomy, essential for success in biology education and further scientific exploration.

Frog Dissection External Anatomy Answers: A Comprehensive Guide for Students and Educators

Frog dissection external anatomy answers are fundamental to understanding amphibian biology and preparing students for hands-on laboratory experiences. Recognizing the external features of a frog not only aids in identification and classification but also provides insights into how these structures support vital functions such as movement, respiration, and reproduction. This article offers a detailed, reader-friendly exploration of frog external anatomy, blending scientific accuracy with accessible explanations to enhance learning and teaching.

Understanding the Importance of External Anatomy in Frogs

Frogs are often used as model organisms in biology because their external features are relatively easy to observe and relate to their internal systems. By studying external anatomy, students can:

- Identify key anatomical structures.
- Understand the functions of various parts.
- Develop skills in scientific observation and description.
- Prepare for internal dissections with contextual knowledge.

Frog external anatomy is characterized by a variety of features that have evolved to support their amphibious lifestyle, including adaptations for jumping, swimming, breathing, and reproduction.

Key External Features of a Frog: An In-Depth Overview

- Head and Face Structures

a. Eyes

Frogs possess large, prominent eyes located on the top of their head, providing a wide field of vision. The eyes are protected by a transparent eyelid called the nictitating membrane, which can be drawn over the eye for protection and moisture. The eyes are crucial for detecting movement and prey.

b. Tympanic Membrane (Eardrum)

Located just behind the eyes, the tympanic membrane is a circular, flat disc that functions as the frog's eardrum. It transmits sound vibrations from the environment to the inner ear, playing an essential role in communication and predator detection.

c. Nostril Openings

Located on the upper part of the head, the nostrils allow frogs to breathe air while submerged. Their position enables them to breathe while remaining mostly underwater.

- External Limbs and Their Functions

a. Forelimbs

Frogs have four fingers on each hand, with three toes on the front limbs. The forelimbs are primarily used for balance and landing after a jump. The webbing between the fingers may be minimal or absent, depending on the species.

b. Hindlimbs

The hind legs are long and powerful, designed for jumping and swimming. They typically have four toes with webbing between them, aiding in propulsion through water. The length and strength of hind limbs vary among species but are generally proportionally larger than forelimbs.

- External Body Coverings and Features

a. Skin

Frog skin is smooth and moist, which facilitates cutaneous respiration ? the process of breathing through the skin. The skin also contains mucus glands that keep it moist and can secrete toxins as a defense mechanism.

b. Dorsal and Ventral Surfaces

The dorsal side (back) is often more camouflaged, helping frogs blend into their environment, while the ventral side (belly) is usually lighter-colored.

c. Cloaca

Located at the posterior end, the cloaca is a common opening for excretory, reproductive, and digestive tracts. It is not externally visible but is important in reproductive processes.

External Reproductive Structures and Features

- Male vs. Female External Differences

- Male Frogs: Often have vocal sacs (pouches in the throat) used for calling during mating season. Their thumbs may be thicker or more muscular, aiding in grasping females during amplexus (mating embrace).

- Female Frogs: Usually larger and lack vocal sacs. Their vent area may be more rounded, and they carry eggs internally or externally depending on the species.

- Vocal Sacs and Other Features

Vocal sacs are inflated with air during calling. They are located under the chin or on the sides of the head and are critical for attracting mates.

Common External Anatomy Questions and Their Answers

Understanding typical external anatomy questions can help clarify students? comprehension of frog dissection studies. Here are some common questions along with detailed answers:

Q1: What are the main external features used to identify a frog?

Answer: The main external features include the head (eyes, tympanic membrane, nostrils), limbs (forelimbs and hind limbs), skin texture and coloration, cloaca, and reproductive structures such as vocal sacs in males.

Q2: How can you distinguish a male frog from a female frog externally?

Answer: Males often have larger, more pronounced vocal sacs, thicker thumbs (used during mating), and sometimes darker coloration. Females tend to be larger overall and lack vocal sacs. The vent area in females is typically more rounded, and they carry eggs during breeding season.

Q3: What is the function of the tympanic membrane?

Answer: The tympanic membrane transmits sound vibrations from the environment to the frog's inner ear, enabling hearing. It is essential for communication, especially during mating calls and predator alerts.

Q4: Why do frogs have webbed feet on their hind limbs?

Answer: Webbing increases the surface area of the feet, aiding in swimming by providing more propulsion in water. It also helps in jumping by creating a more powerful push-off.

Q5: Describe the external features that facilitate a frog?s ability to breathe.

Answer: Frogs breathe through their skin (cutaneous respiration) and their lungs. The moist, permeable skin allows gas exchange directly with the environment, especially when submerged or in humid conditions. The skin's surface area and mucus secretion help optimize respiration.

Practical Tips for Students During Dissection

- Observation First: Before making any cuts, carefully observe the external features, noting differences between species or sexes.
- Use Proper Terminology: Refer to structures by their scientific names to enhance clarity.
- Handle with Care: External features, especially delicate structures like vocal sacs or tympanic membranes, require gentle manipulation.
- Compare and Contrast: Document differences between specimens when possible, such as size, coloration, or presence of specific features.

Educational Significance of External Anatomy Study

Studying external frog anatomy provides a foundational understanding of amphibian biology and physiology. It helps students correlate external features with internal systems such as the circulatory, respiratory, and reproductive systems. Moreover, it fosters an appreciation for adaptations that have evolved to support life both on land and in water.

Conclusion

Frog dissection external anatomy answers are vital for students delving into amphibian biology. Recognizing and understanding the external features of frogs allows for a deeper appreciation of their anatomical adaptations and ecological roles. Whether identifying structures during dissection or studying external features for biological classification, a solid grasp of frog external anatomy enriches the scientific learning experience. Through careful observation, terminology, and contextual understanding, students can unlock the secrets held by these fascinating amphibians and develop skills applicable across biological sciences.

QuestionAnswer What are the main external features of a frog used during dissection? The main external features include the head with eyes and tympanic membranes, the forelimbs and hindlimbs, the dorsal and ventral surfaces, and the cloaca. These features help identify different parts and understand frog anatomy. How can I identify the frog's tympanic membrane during external

dissection? The tympanic membrane appears as a circular, grayish membrane located just behind the frog's eyes. It functions as an external eardrum and is usually visible on the sides of the head. What is the purpose of the frog's skin markings and coloration in external anatomy? The skin markings and coloration serve as camouflage, helping frogs blend into their environment to avoid predators. They also can indicate the frog's species and sometimes its health or reproductive status. How do the legs of a frog differ externally between the front and hind limbs? The front limbs are shorter and have four toes, while the hind limbs are longer, muscular, and have five toes adapted for jumping. These differences are visible externally and are essential for movement. What external features should be examined to identify the frog's reproductive organs during dissection? In males, the external reproductive organ is the cloaca, which is located at the vent. In females, the cloaca is also visible, but the presence of eggs or oviduct openings may be observed through external examination.

Related keywords: frog external anatomy, frog dissection labels, frog external features, frog anatomy diagram, frog dissection guide, frog external parts, frog anatomy quiz, frog dissection worksheet, frog external morphology, frog body parts

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