WARTS AND ALL

This northern leopard frog showcases many of the special features and abilities for which Anurans are known.

Tympanum

Frogs do not have external ears like us. Many frogs have a circular piece of skin called a tympanum instead. This covers their eardrums, making them much more waterproof.

Nictitating Membrane

This thin inner eyelid keeps the eye moist, protects it from dust and helps the frog see clearly underwater.

Eyes

Sight is very important to frogs. Their eyes don't rotate like ours do, but stick out from their head. This gives them a very wide field of vision – almost 360 degrees! The shape of their pupils varies depending on the species.

Warts

Some species of frog, especially those commonly called 'toads', are covered in large bumps. Smaller bumps produce poisonous or bad-tasting chemicals, while larger, balloon-like sacs near the head contain a concentrated dose of poison. Many people believe that touching frogs can give you warts, but this is not true.

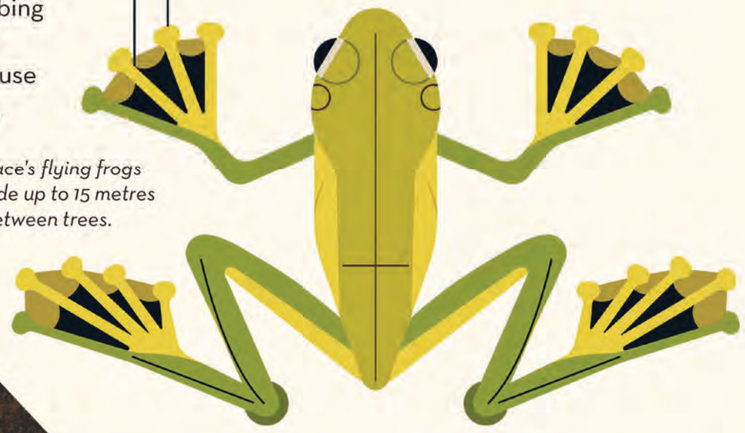
The poison contained in the skin of this warty cane toad can cause illness, hallucination or even death.

Feet

Many frogs have webbing between their toes, so their feet act like flippers while swimming. Other frogs, such as those who live in dry areas or in trees, usually have only partially webbed toes or no webbing at all. However, some tree frogs have excessively webbed toes, which they use as parachutes to glide between trees.

Adhesive Pads

Some frogs have enlarged sticky pads at the tips of their fingers and toes to help them climb trees and hang out upside down.



Wallace's flying frogs can glide up to 15 metres between trees.

African dwarf frogs have webbing between their toes because they spend most of their lives underwater.

Legs

Many species of frog can jump very far using their long, powerful hind legs. An elastic tendon wraps around the frog's ankle bone and pings off to propel the frog forwards, like an arrow from a bow.

The black tubercle on this Eastern spadefoot toad's foot helps it burrow underground, where it spends most of its life.

Tubercle

Species that burrow into the ground have hardened skin nodules sticking out from the heels of their hind feet.

AND THE AWARD GOES TO...

Glass frogs have very thin skin on the underside of their torso, which allows us to see inside their bodies! One species, the Yaku glass frog, wins the award for the most transparent frog. You can see its muscles, veins, skeleton, and organs through its skin. You can even watch its heart beat or its stomach digest food.

The award for the loudest frog goes to the Puerto Rican common coquí frog. Males call through the night with a noise as loud as a lawn mower. Their call has two distinct tones that give the frog its name – 'co' and 'kee'. The first tone drives away rival males and the second tone is for enticing females.

The mimic poison frog wins the award for best impersonator. This harmless species mimics the colouring of three different poisonous frogs so predators will avoid it.

The superbly weird wolverine frog has to win the creepiest frog award. It has 'hairy' sideburns and, to fight off threats, it intentionally breaks its toe bones so they burst through its skin like makeshift claws. The 'hairs' on males are actually little bits of skin, which are thought to increase its surface area and help it absorb more oxygen.

Many poison arrow frogs produce dangerous toxins, but none are more deadly than the golden poison arrow frog. The stuff that oozes from their skin is 20 times more lethal than that of any other frog. Just one gram of this poison is enough to kill several thousand people, so it's not surprising that scientists wear thick gloves when picking them up.

The South African sharp-nosed frog leaps to victory in the long jump. With legs almost three times the length of their bodies, they're able to hop more than four metres in a single bound – that's over 80 times their body length! A human would have to jump the length of a football field to compete with these frogs.

MAKING A MEAL OF THINGS

Many frogs are superbly accurate when targeting prey. This is thanks to a secret weapon: their tongue. It shoots out, sticks to the insect, or other unfortunate creature, and then drags it back into the frog's mouth. This movement is so fast that it can happen within the blink of an eye.

Roll Off the Tongue

A frog's tongue is usually attached at the front lower part of its mouth and is coiled back towards the throat. When ready, the frog opens its mouth and the tongue unfolds so speedily that it is thrust at the prey like a spring.

Big Mouth

Frogs have exceptionally wide mouths, which allow them to swallow their prey whole. Many have sticky tongues to catch unsuspecting victims, but sometimes they simply stuff creatures into their mouths using their hands.

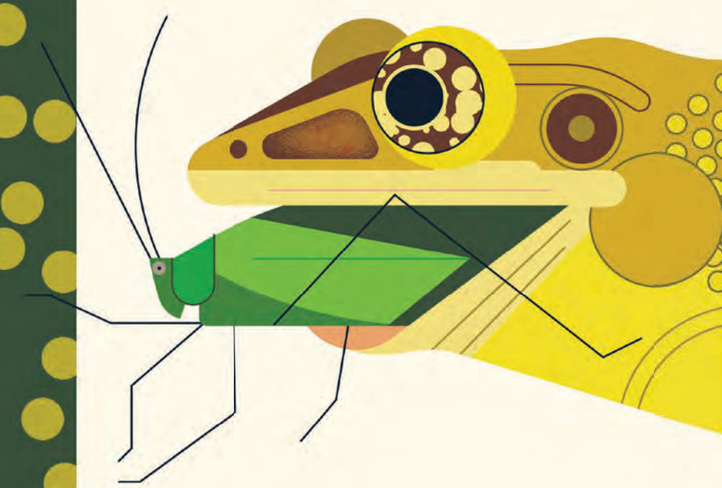
A green frog catches a dragonfly

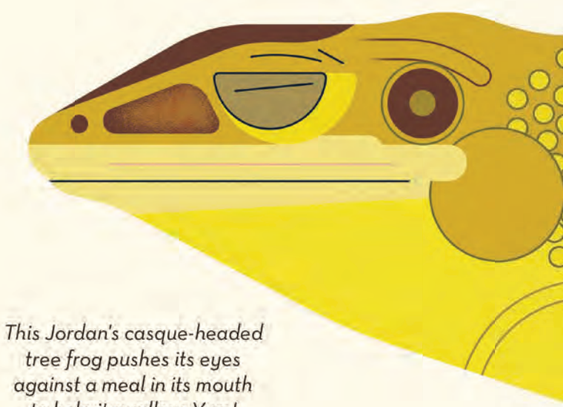
On the Tip of Your Tongue

A frog's tongue is soft and covered in very special spit. When still, the spit is super sticky and firm, like honey. But while in motion, the force of the quick tongue action turns it into a runny liquid. When a frog's tongue hits its target, the saliva spreads over the surface of the prey. As it stops moving, it very quickly firms up again and traps the victim on the end of the tongue.

Close Your Eyes

Have you ever seen a frog swallow? Curiously, it closes its eyes to do so. What actually happens is that the frog's eyeballs are pulled into its mouth briefly to push the prey against its tongue. This loosens the spit again, allowing the frog to swallow its meal more easily.





This Jordan's casque-headed tree frog pushes its eyes against a meal in its mouth to help it swallow. Yum!

WEIRD AND WONDERFUL

Darien Stubfoot Toad

These frogs change colour and pattern as they get older.

Australian Lace-Lid Tree Frog

This delightful frog has nictitating membranes decorated with lines and dots.

Mutable Rainfrog

Known as the 'punk-rocker' frog, this species can change its skin from smooth to spiky in just a few minutes!

Purple Frog

This rather strange-looking creature spends most of its life underground.

Desert Rain Frog

The adorable angry squeak of this cute frog is worth looking up – there's nothing quite like it!

Botta's Bright-Eyed Frog

These frogs are unique to the rainforests of Madagascar and have the most spectacularly colourful eyes.

Brazilian Poison Frog

This stunningly beautiful species of poison dart frog looks like it's wearing fancy pyjamas.

BORN THIS WAY

Frogs go through several massive changes as they grow up. At each stage of their life cycle, frogs will look and behave differently. The process of changing from egg to adult is called 'metamorphosis', and it happens in a variety of remarkable ways across different species.

This life cycle shows the development of the European common frog.

Adult

When a froglet begins to leave the water and absorbs the remains of its tadpole tail into its body, it becomes a frog. After a couple of years, this frog will be able to mate and produce offspring of its own.

Egg

Frogs lay soft, jelly-like eggs, which are stuck together in a group called a 'clutch'. The eggs are vulnerable to drying out, so they are laid in watery areas, such as ponds. A single clutch can contain thousands of eggs.

Froglet

The tadpole grows back legs first, and then a few weeks later its front legs appear. The tail begins to disappear too, as it develops into a tiny version of an adult frog. It has now changed into a froglet.

Tadpole

A tadpole wriggles free from its egg and begins swimming around the water. Tadpoles are similar to fish, with strong tails for swimming and gills in their heads, which help them breathe underwater.

The common toad lays its eggs in a string formation.

These two Fiji tree frog eggs don't hatch as tadpoles...

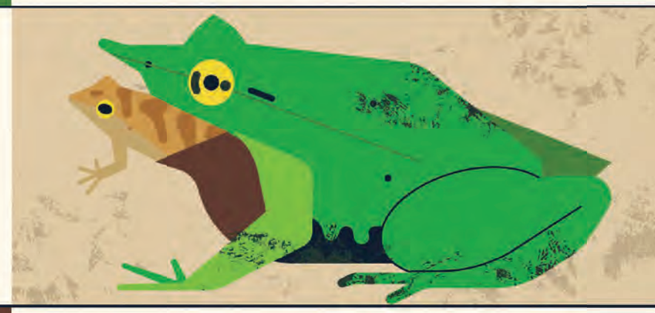
Some frogs skip the free-roaming tadpole stage in their development. This allows them to breed on land. In this 'direct development' cycle, the transformation happens within the egg and a fully formed froglet emerges once it is ready.

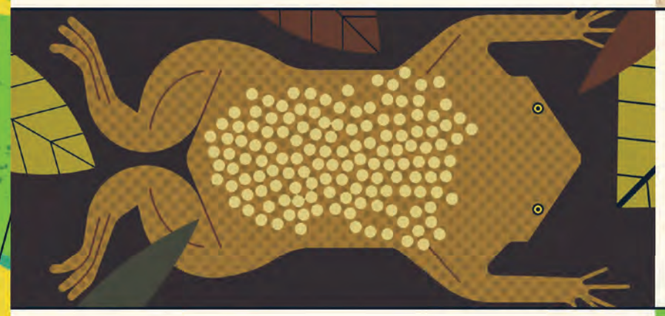
...tiny froglets are ready to come out instead.

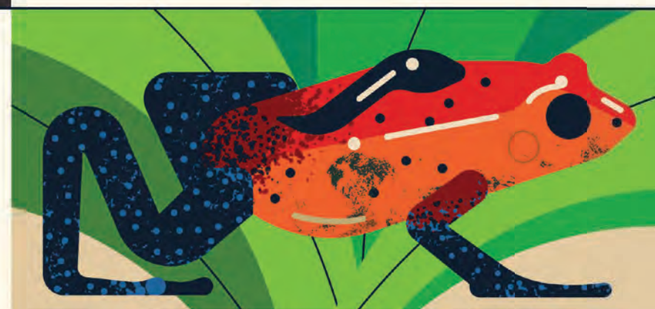
Doing Things Differently

Beating your eggs may sound like bad parenting, but grey foam-nest tree frogs come together in groups of up to 30 to beat their eggs together with fluid using their feet. This forms a foam, which hardens, protecting the developing eggs.

When Darwin's frog tadpoles emerge, the male scoops them up in his mouth. The tadpoles then complete most of their growth cycle inside his vocal sac and six weeks later, he throws up lots of little froglets.





The female Suriname toad releases eggs that are then embedded in her back by her partner. Skin forms over them to create little pockets where the eggs develop. Eventually, miniature froglets will burst out of her back. Yuck!

Strawberry poison dart frogs lay their eggs on leaves. The male guards them, keeping them moist, and when the tadpoles emerge, the female carries them one by one to different water sources. She then returns to each one every few days to bring them some food.