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Discovery

Scripture & Science for Kids

The Gecko Declares God's Glory

ERIC LYONS

YOU MAY THINK

THAT GECKOS ARE MERELY CUTE, LITTLE LIZARDS THAT OCCASIONALLY APPEAR IN CAR INSURANCE but the truth is, these remarkable reptiles are loaded with design. In a way, they are like miniature superheroes that can take out pests, escape danger, and walk up walls.

When you have an insect pest problem, who do you call? Most people call an exterminator who sprays chemicals and sets out glue boards in hopes of ridding your house of pests. Perhaps everyone should just invest in some of God's geckos. After all, these little reptiles are known to eat in one night as much as 50% of their body weight in insects, including cockroaches, crickets, and beetles. Geckos can be great to have around the house or at work. At Apologetics Press, where this magazine is published, we have several geckos that often hunt insects just outside the front door. We welcome these little insect-ingesting critters that remind us of God's creative designs and power.

Many species of geckos also have an amazing escape maneuver when caught by the tail by predators. Geckos don't play dead or become invisible; they actually self-amputate their tails. If a predator catches a gecko by the tail, the lizard contracts its tail muscles in such a way that a tail bone (called a vertebra) breaks. Thus, the gecko is able to get away, while the predator is left holding the detached part of the tail. Amazingly, over the next few months the gecko grows a new tail, complete with tough tissue, muscles, and scales.

Imagine if cars could regenerate themselves after accidents. What if cell phones could automatically restore themselves after being smashed? If an engi-

neer could design machines with gecko-like regenerating abilities, he would be hailed as a genius. No one would ever assume that a car or phone with such abilities could be the product of evolution; it would have to be designed. Similarly, the gecko's self-amputating, regenerating abilities must have been designed by a grand Designer.

Perhaps even more incredible is the gecko's ability to walk up vertical walls and across ceilings without the use of man-made suction cups or sticky liquids. A gecko has five toes on each of its four feet that can point in almost any direction. On each toe are thousands of hair-like structures called setae (SEE-tee). At the end of each seta are tiny structures that scientists call spatulas. Why? Because they look like spatulas. According to scientists, these tiny spatulas are perfectly suited to allow geckos to stick to nearly any surface.

Scientists are so amazed by the gecko's "sticky" ability that they have set out to copy it. In recent years, scientists have closely examined the gecko's setae and spatulas and have developed tiny man-made tubes (called nanotubes) that mimic the real, biological wonders. From these artificial nanotubes scientists have produced small strips of tape that can be reused dozens of times. Still, as good as these man-made strips of tape are, scientists admit that they are nowhere near as good as the real thing. As one evolutionary scientist put it: "[G]eckos have…one of the most versatile and effective adhesives known" to man. Why are they so versatile and effective? Why is the gecko such an amazing animal? Because "the everlasting God, the LORD, the Creator of the ends of the earth" (Isaiah 40:28) was the mastermind behind this creature.

The Puzzling Platypus is NO Product of Evolution

ERIC LYONS

With its broad, flat tail, the platypus (like the beaver) can maneuver easily in water. It also stores fat in its tail: normally, the fuller the tail, the healthier the platypus.

SCIENTISTS CLASSIFY THE PLATYPUS AS A MAMMAL, YET IT IS UNLIKE ANY OTHER MAMMAL YOU

have ever seen. It is about the size of a house cat with fur thicker than a polar bear's. It can store food in its mouth like a chipmunk. It has a beaver-like tail and webbed feet like an otter. It has a bill like a duck and spurs like a rooster. What's more, it lays eggs like a turtle and produces venom like a snake. If there was ever an animal to call "unique," it would be the platypus.

Platypuses show every indication of being designed by the grand Designer.

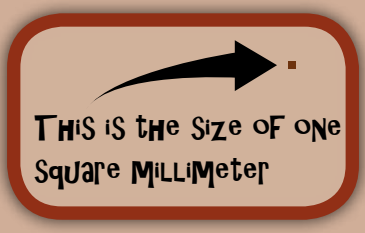
- God designed their feet to work extremely well in water and on land. They flatten their

roll-away webbing beyond their claws in order to maximize their movements in water. Then, when they need to walk or run on land or burrow in the riverbank, they can quickly roll back their webbing under their claws.

Did You Know?

The name platypus comes from two Greek words: *platy*, which means "broad" or "flat," and *pous*, which means "foot." Thus, platypus means "broad/flat foot," referring to the animal's webbed feet.

- God gave the platypus thick fur to stay warm in cold waters. A platypus has about 800 hairs per square millimeter of skin (compared to the human who has about two hairs per square millimeter on his head). The platypus' fur is so dense that it can trap a layer of air next to its skin. This air works as insulation to keep the platypus warm.



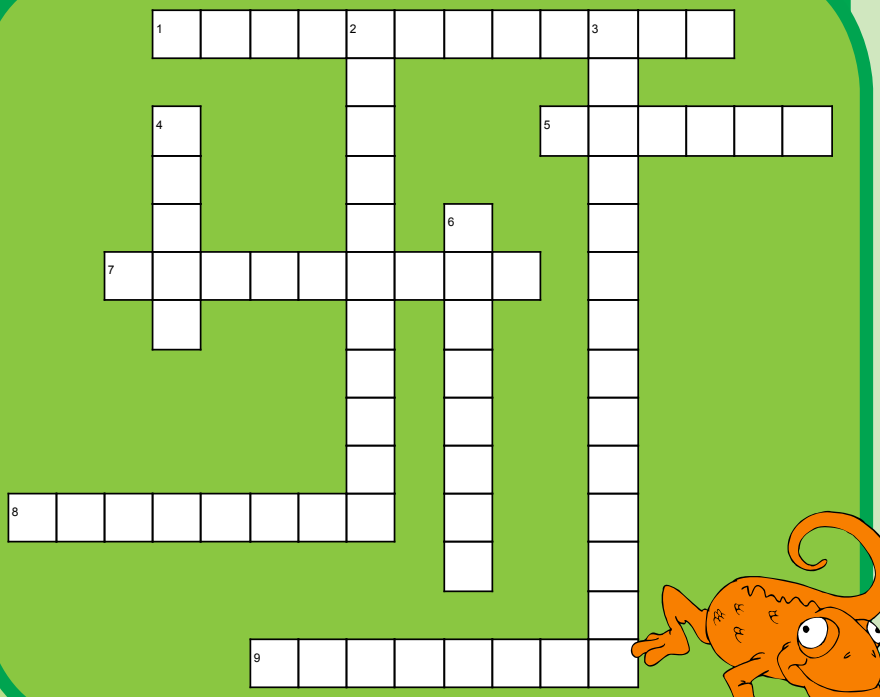
- How can the platypus completely close its eyes and ears under water and find enough food to survive? Does it just clumsily tumble bill-first into the bottoms of rivers and streams in hopes of getting lucky? Actually, God designed this curious creature with a very sensitive snout. Scientists have learned that the platypus' leathery bill has a complex electro-receptor system in it. This system allows the platypus to sense the weak electric impulses in the muscles of its prey, including earthworms, tadpoles, and shrimp, which often are hiding under the mud and rocks.

Like so many animals that scientists study, the more scientists learn about the platypus, the more amazed they are with this curious creature. Although evolutionists would have us believe that this unique animal is the product of many millions of years of evolution, in reality, the duck-billed platypus declares the glory of God.

"You are worthy, O Lord, to receive glory and honor and power; for You created all things, and by Your will they exist and were created" (Revelation 4:11).

ACTIVITY PAGES

CROSSWORD CHALLENGE

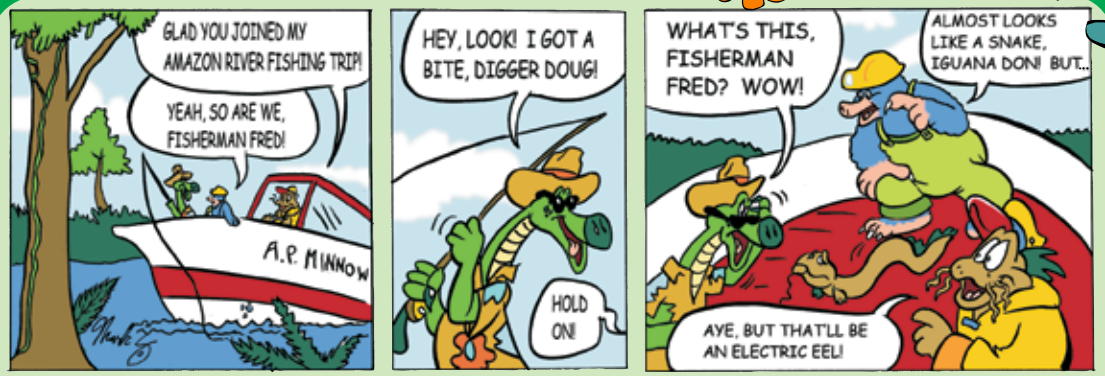


Across:

1. Knifefish
5. Can eat in one night as much as 50% of their body weight in insects
7. Tiny man-made tubes that mimic the real, biological wonders on Geckos' feet
8. Has a leathery bill with a complex electro-receptor system in it
9. Tiny structures at the end of a Gecko's seta

Down:

2. Geckos can self-amputate their tails by contracting these
3. Muscles arranged like batteries
4. Hair-like structures on Geckos' toes
6. Tail bone (or back bone)



TRUE OR FALSE

1. ☐ Scientists classify electric eels as reptiles.
2. ☐ Geckos often eat insects such as cockroaches, crickets, and beetles.
3. ☐ A platypus is a venomous animal.
4. ☐ The gecko's self-amputating, regenerating abilities must have been designed by a grand Designer.
5. ☐ A platypus has very thin fur.
6. ☐ It makes perfect sense that the electric eel came about by mindless evolution.
7. ☐ Geckos have one of the most versatile and effective adhesives known to man.
8. ☐ On day five of Creation, God specially designed "every living thing that moves, with which the waters abounded."
9. ☐ Scientists have learned that the platypus' leathery bill has a complex electro-receptor system in it.
10. ☐ Electric eels can emit a shock of up to 600 volts.

Dear Digger Doug,

In your prayers, do you have to specifically mention every sin you do and ask forgiveness, or can you just generally say, "God please forgive all my sins?"

—Alyssa, Bedford, TX

Dear Alyssa,

We all want our sins forgiven. The Bible explains to us that through the blood of Jesus we can have our sins forgiven (Ephesians 1:7). The Bible also says that we come in contact with Jesus' death (and blood) through baptism (Romans 6:3-6). But what happens when we sin after we have been baptized? The inspired writer James said: "Confess your trespasses to one another, and pray for one another, that you may be healed" (5:16). Now, does that mean that we have to confess **every single sin** we have ever done? Certainly not. In fact, there are most likely sins that we do that we do not even know we do. There is no way that a person can know every sin he or she has committed. Jesus used a model prayer to teach His apostles how to pray. In that prayer, He taught His followers to pray: "And forgive us our sins, for we also forgive everyone who is indebted to us." Notice that Jesus did not tell them to list every sin. He used the general statement that covered them all. It may be the case that a person commits a sin that he or she needs to pray for **specifically**. If a person murders another person, or deliberately lies, or steals something, he should confess that particular sin. We read a story about a man who needed to confess a specific sin in Acts 8:18-25. But Jesus' prayer shows us that God understands and listens to a general statement about forgiveness as well.

FILL IN THE BLANKS

1. The name platypus comes from two Greek words: _____, which means "broad" or "_____," and *pous*, which means "_____."
2. "You are worthy, O Lord, to receive glory and _____ and _____; for You created _____ things, and by Your will they exist and were _____" (Revelation 4:11).
3. A platypus has about 800 _____ per square millimeter of skin.

ON A SEPARATE SHEET OF PAPER

1. List three ways that electric eels use their electrical currents.
2. Explain why evolution cannot logically explain the existence of either the gecko or the platypus.

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Extraordinary Electric Eels

ERIC LYONS

ELECTRIC EELS ARE PUZZLING TO A LOT OF PEOPLE. THEIR SIX-FOOT-LONG, TUBULAR, SCALELESS BODIES look and move more like snakes than fish. But scientists actually classify them as fish. Adding to the confusion, however, is that scientists do not classify electric eels as eels, but knifefish.

So how do electric eels produce electric charges? It's all in the design of the animal. God made this curious creature with three pairs of organs (six in all), which make up nearly its entire tail region—about 80% of its body. These organs are made up of about 6,000 electroplaques (i-LEK-tro-plaks). Electroplaques are muscles arranged like batteries. These muscles do not contract like normal muscles. Instead, they give off electrical charges. At will, an electric eel can send signals from its brain, through various nerves, to its battery-like muscles. What's more, this divinely designed creature can choose to produce a small current of electricity, or it can carry out a shock of up to 600 volts—enough to stun a horse. Electric eels use these electrical currents for a variety of reasons. They use this ability (1) to defend themselves from predators, (2) to stun or kill their prey, and (3) to communicate with other electric eels.

How could evolutionary theory ever adequately explain a creature as extraordinary as the electric eel?

- How did the first electric eel evolve from a non-electric eel?
- How did all of the "batteries" of the first electric eel get put in precisely the right place in order to produce electricity after receiving signals from the animal's brain by way of special nerves?
- How can evolutionists logically explain the electric eel's ability not to shock itself whenever it produces electric charges?
- How would it have known it needed to evolve a special layer of fat around its body in order to protect itself from electric currents that it had never yet produced?

The only explanation that logically explains the first electric eel is God. On day five of Creation, He specially designed "every living thing that moves, with which the waters abounded" (Genesis 1:21), including the extraordinary electric eel.

ANSWERS

FILL IN THE BLANKS: 1. platy, flat, foot; 2. honor, power, all, created; 3. hairs.

TRUE OR FALSE: 1-F; 2-T; 3-T; 4-T; 5-F; 6-F; 7-T; 8-T; 9-T; 10-T.

CROSSWORD CHALLENGE: Across: 1. electric eels; 5. geckos; 7. nanotubes; 8. platypus; 9. sprinklers; **Down:** 2. tail muscles; 3. electroplaques; 4. setae; 6. vertebra.

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