platypus

eslvideo.com Quiz by: Roberto L

1. What is the female platypus searching for?

○ a.) food

○ b.) fresh water

○ c.) a mate

2. What happened to the rivers and streams over the past year?

○ a.) They overflowed.

○ b.) They turned to mere trickles.

○ c.) They became very deep.

3. What helps the platypus sense her surroundings underwater?

○ a.) Her eyes

○ b.) Her ears

○ c.) Her duck-like bill

4. How many pairs of chromosomes does the platypus have?

○ a.) One

○ b.) Three

○ c.) Five

5. What does the female platypus do to protect her young?

○ a.) She builds a burrow.

○ b.) She swims away.

○ c.) She hides in a tree.

6. What animal threatens the platypus?

○ a.) A fox

○ b.) A cat

○ c.) A dog

7. How does the male platypus court the female?

○ a.) By singing

○ b.) By swimming alongside her

○ c.) By bringing her food

8. Where does the female platypus lay her eggs?

○ a.) In a tree

○ b.) In a burrow

○ c.) In the water

9. How does the female platypus feed her babies?

○ a.) With a bottle

○ b.) With her mouth

○ c.) With milk from her belly

10. What happens to the young platypuses after a few days?

○ a.) They stay with their mother.

○ b.) They leave the burrow.

○ c.) They go to sleep.

Transcript

Waddling along the parched
Australian earth, this female platypus is searching
for fresh water. Over the past year, a severe drought
turned rivers and streams to mere trickles. She barely survived
and was unable to reproduce. Could the next year bring
a change in luck? It's autumn and fat raindrops finally
come spilling from the sky. Within days, the platypus finds a river
and begins to hunt. Her webbed feet propel her along and her waterproof coat
traps heat close to her body. Underwater, she senses her surroundings
with her duck-like bill, which is fitted with about 40,000
electroreceptors. This allows her to detect the minuscule
electrical signals coming from a glass shrimp’s
nerves and muscles. She makes it a quick meal. And once she clambers back
on land to construct a burrow, she waddles in a lizard-like posture, her limbs moving horizontally
to her spine. The platypus has many quirks. As a monotreme, she's part of the most
ancient lineage of mammals alive today. Consequently, she has a curious mix of
mammalian, avian, and reptilian features, which is reflected in her genome. For instance, mammals usually have one
pair of chromosomes that determine sex. But the platypus has five,
which more closely resemble a bird’s. Let's hope she gets to put them to use. She regains her strength and,
as winter turns to spring, it’s time to mate. However, she can’t raise her young here. The surrounding land has
begun to be deforested, causing the riverbank to erode. Instead, she journeys
upstream and settles in a clear, deep pool
sheltered by a river red gum tree. Suddenly, a rustle flushes birds
from the undergrowth and a fox appears. These predators have threatened platypuses ever since they were introduced
to Australia by white settlers in 1855. The fox doesn’t see her this time,
but the platypus will need to stay alert. Two males also occupy this area and,
soon enough, they begin competing for her affections. Each has spurs on its hind legs containing
a potent snake-like venom. One male fights the other off

and courts the female over several weeks, swimming alongside her,
and occasionally biting her tail. Eventually, she reciprocates, and they swim around in circles
before doing the deed. The male platypus has a penis
with eccentric features like two heads and spines
that aid and fertilization. Over the following week,
the female constructs an extensive burrow furnished with a cozy nest. She plugs up the tunnels leading in, making them appear as dead ends
to potential predators. Then, much like a reptile or bird,
she lays eggs from her cloaca, a single opening that's used for both
reproduction and excretion. She incubates her eggs, and as
the river red gum tree blooms, her offspring hatch. Like other mammals, she feeds them milk. But unlike other mammals,
she has no nipples. Instead, her milk oozes
from mammary glands onto her belly, where her babies slurp it up. This pooled milk invites bacteria, but the platypus also produces
potent antibacterial proteins, ensuring her newborns are safe. She continues nursing them
for four months— hunting, evading the fox,
and repairing her burrow all the while. By the time her young are ready to make their debut, the summer is waning. One evening, after the female platypus
returns from hunting, she finds that one nestling has
already struck off on its own. A few days later, the other
also leaves the borough. Soon, her young are living
completely independently. And eventually they’ll leave this part
of the river to make homes of their own.