

Name: _____

Unusual Mammals: Marsupials & Monotremes

Mammals are warm-blooded vertebrate animals with hair that feed their young with milk. Most mammals (such as lions and rodents) give birth to live young that look like smaller versions of their parents. Others rear their offspring differently. Scientists divide these other mammals into two groups: marsupials and monotremes. Oddly, Australia is home to most of these unique mammals. *Almost* all marsupials live in Australia. *All* monotremes live on this small continent that we nicknamed the Land Down Under.



So, what animals are marsupials? What animals are monotremes? And what makes marsupials and monotremes exceptional?

Of nearly 300 marsupial species, kangaroos and koalas are the most famous marsupials. They are also symbols of Australia. Opossums (found in North America), wombats, bandicoots, and Tasmanian devils are a few more marsupials. Marsupials give birth to live young, but they do so at a very early stage of the embryo's development. In other words, baby marsupials are not yet fully formed when they are born.

A female koala gives birth to a single baby once a year. Her baby (called a "joey") is tiny in comparison to its mother. A joey measures less than one inch long and weighs under 0.2 ounces. Its mother averages around 24-34 inches in length and 10-30 pounds in weight. The newborn is blind, hairless, and earless. Yet, its front limbs and sense of smell are fully developed. It follows the scent of its mother's milk. Right after birth, the joey slowly crawls on its front limbs and claws into its mother's pouch. Once inside, it attaches itself to one of the two nipples that swells to fill its mouth. The joey remains in the pouch for the next six months. When the six-month period is over, the joey has hair, can see and hear, and is ready to venture outside.

If you think marsupials are unusual, then you will think monotremes are just outright bizarre! There are only three living monotreme species. They are the platypus, the short-beaked echidna, and the long-beaked echidna. Their uniqueness forced scientists to rewrite the definition of "mammal."

Before the discovery of monotremes in the 18th century, scientists stated that all mammals give birth to live young. You can imagine how shocked scientists were when they came across mammals with breeding behaviors like reptiles. That's right! Platypuses and echidnas lay eggs. Their soft-shelled eggs look like those laid by snakes or other reptiles. Aside from the fact that monotremes don't give birth to live young, scientists also discovered that female monotremes lack one thing that all other female mammals have - nipples. Instead of nipples, female monotremes have mammary glands where milk oozes out onto two patches of fur on their bellies for their young to lap up.

After lengthy debates that went on for nearly a century, scientists finally conceded that platypuses and echidnas are indeed mammals, as they feed their young with milk.

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Nobody knows why most marsupials and all monotremes are found only in Australia. We do know one thing. If we want to have a close encounter a monotreme, we must visit this beautiful, wondrous continent that is just full of surprises!

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Questions

- _____ 1. Which of the following statements about marsupials is correct?
- A. Baby marsupials are not yet fully developed when they are born.
 - B. Newborn marsupials have good eyesight.
 - C. Marsupials lay eggs.
 - D. Koalas and echidnas are examples of marsupials.
- _____ 2. Which of the following statements about monotremes is correct?
- A. Monotremes' eggs are hard-shelled.
 - B. Monotremes feed their young with milk.
 - C. Platypuses, short-beaked opossums, and long-beaked opossums are the only three monotreme species on Earth.
 - D. Baby monotremes attach themselves to their mother's nipples that swell to fill their mouths.
- _____ 3. Marsupials live nowhere else but Australia.
- A. true
 - B. false
- _____ 4. Which of the following is NOT a marsupial?
- A. the flying squirrel
 - B. the black-shouldered opossum
 - C. the red kangaroo
 - D. the common wombat
- _____ 5. Which of the following is NOT a monotreme?
- A. the platypus
 - B. the short-beaked echidna
 - C. the Tasmanian devil
 - D. the long-beaked echidna
- _____ 6. What makes an animal a mammal?
- A. It feeds its young with milk.
 - B. It gives birth to live young.
 - C. It lays eggs.
 - D. It has a pouch to carry its young.
- _____ 7. What do female platypuses feed their newborns with?
- A. fish
 - B. eucalyptus leaves
 - C. milk
 - D. grass

