

## ECHIDNAS (Map Ref 23)



LP, UP, LS, US

Echidnas belong to a unique group of animals known as monotremes. There are only three types of monotremes in the world and all are found in Australia. They are the Short-beaked Echidna, the Long-beaked Echidna and the Platypus. Monotremes are mammals, however, instead of giving birth to live young, they lay eggs. Females do not have a permanent pouch, however, when she becomes 'pregnant' a temporary pocket develops in her belly. The female will then incubate her egg for a few days in her pouch before it hatches. Upon hatching, the young will feed on milk which oozes from its mother's skin, females also do not have a permanent teat for the young to attach itself, instead they rely on this secretion of milk to nourish the young.

Female echidnas produce one egg at a time. Once hatched, the young are referred to as 'puggles'. A puggle is about 1.5 cm long when it is born and it lacks spines. At seven weeks of age it will leave the pouch and begin to grow spines. Its mother helps with feeding until the young echidna is about 14 weeks old.

Echidnas are found in all areas of Australia where there is enough groundcover for them to hide in and where there is a food supply for them. Echidnas feed on termites. They have very powerful legs and sharp claws to break open termite mounds. Once they have broken into a mound they insert their long tongue into the nest to lick up the termites. Their tongue is covered with large amounts of sticky saliva so that the termites actually stick to their tongue. Echidnas' tongues reach a length of 18 cm. Once collected, echidnas grind the termites against hard plates in their tongue and the roof of their mouth since they lack teeth.

Echidnas' spines are actually hardened hairs. Softer, shorter hairs are located between the spines which can reach a length of 40cm. Spines are used to protect their soft underbelly, to camouflage the animal amongst ground covering and also to wedge themselves into hollows or narrow spaces so that they cannot be removed by another animal.

Q1

What do you think Echidnas use their spines for?  
FOR PROTECTION & SELF DEFENCE.

Why do Echidnas need a long tongue?  
TO REACH TERMITES RIGHT INSIDE THEIR NEST.

Q2

Why do Echidnas spines all face the same way? (Run your fingers through your hair going down to your neck, try and do the same from the bottom up.)  
SO THEY DON'T GET STUCK IN UNDERGROWTH AS THEY ARE MOVING ABOUT.

A1

Pretend that your body is covered in spines. What would be some of the good things about having spines? What would some of the not-so-good things about having spines?

A2

Can you give a reason why Echidnas have a flat body?

A3

Give advantages and disadvantages monotremes' adaptations have over other mammals.