Who Warms the Eggs?

Compare how three birds incubate eggs and care for hatchlings.

ZOO.9.11 "Describe the parenting behavior used by different birds to incubate their eggs and care for hatchlings."

NAME _____ DATE _____

1 READ AND MARK

Read it twice

YOUR JOB Underline how each bird's eggs stay warm, and circle details showing what adults do or do not do after hatching so you can compare their parenting.

Three Ways to Raise a Chick

1. On Antarctic sea ice, an emperor penguin has no nest of twigs to shelter its single egg. After the female lays it, the male balances the egg on his feet beneath a fold of warm skin called a brood pouch. He stays with the egg through weeks of winter cold while the female travels to feed at sea. When the chick hatches, the returning female feeds it by bringing up food from her stomach. The male then goes to sea to feed, and the parents take turns feeding and sheltering their chick.

2. In a North American woodland, a wood duck chooses a hole in a tree for her eggs. The female lines the cavity with down feathers and sits on the eggs, keeping them warm until they hatch. Unlike an emperor penguin chick, a wood duck hatchling can walk and find food soon after hatching. Within about a day, the ducklings jump down from the nest and follow their mother toward water. She leads them to places with food and warns them of danger, but she does not bring up food for them to eat. The ducklings feed themselves.

3. An Australian brush turkey uses a different source of heat. A male builds a large mound of leaves and soil, and females lay eggs inside it. As the leaves decay, they release heat that warms the buried eggs. The male checks the mound's temperature with his bill and changes the mound to help keep it suitable for incubation. He does not sit on the eggs. After hatching, each chick digs its way out and can move and find food without a parent. The adults do not feed or guide the chicks, unlike the adults in the other two examples.

2 ANSWER WITH EVIDENCE

Use the passage

1. How does the emperor penguin male keep the egg warm, and how do the parents care for the chick after it hatches?

2. What does the wood duck female do to incubate her eggs, and how does her care change after they hatch?

3. How does the Australian brush turkey keep its eggs warm without sitting on them, and what care do the chicks receive after hatching?

4. Wood duck and brush turkey chicks both find their own food. How does adult care after hatching differ between these birds?

3 YOUR TURN

Your own words

Invent a bird that nests on a cold, rocky coast and whose hatchlings cannot feed themselves. In four sentences, describe how its adults might incubate eggs and care for hatchlings, then compare its strategy with two birds in the passage.

Who Warms the Eggs?

PART 1 · READ AND MARK

Underline how each bird's eggs stay warm, and circle details showing what adults do or do not do after hatching so you can compare their parenting. Accept any marking that follows this job and points at the right text.

PART 2 · ANSWERS

#	QUESTION	ANSWER
1	How does the emperor penguin male keep the egg warm, and how do the parents care for the chick after it hatches?	**The male holds the egg on his feet beneath his brood pouch. After hatching, the parents take turns feeding and sheltering the chick.**
2	What does the wood duck female do to incubate her eggs, and how does her care change after they hatch?	**She lines a tree cavity with down and sits on the eggs. After hatching, she leads the ducklings toward food and warns them of danger, but they feed themselves.**
3	How does the Australian brush turkey keep its eggs warm without sitting on them, and what care do the chicks receive after hatching?	**Decaying leaves heat the mound, and the male adjusts it to regulate the temperature. After hatching, the chicks receive no feeding or guidance from adults.**
4	Wood duck and brush turkey chicks both find their own food. How does adult care after hatching differ between these birds?	**A wood duck mother leads her ducklings and warns them of danger. Brush turkey adults do not guide or feed their chicks.**

PART 3 · YOUR TURN (SAMPLE ANSWER)

On a cold, rocky coast, both adults of my invented bird take turns sitting on their egg to keep it warm. After hatching, they shelter the chick and bring it food from the sea. Like emperor penguins, these adults feed a chick that depends on them, but both adults share incubation. Unlike Australian brush turkeys, they use body heat instead of a mound and continue caring for their chick after it hatches.

Accept other plausible incubation and hatchling-care strategies that fit the invented bird's habitat and dependent chicks. The response should contain four sentences and accurate comparisons with two birds from the passage.