

## Quiz: RI.6.1

Read the passage. Then answer the questions.

### Zoo Meals

- 1 What are you going to eat for dinner tonight? Chances are, if you asked 10 random people that question, you'd get 10 different answers. Whatever is on tonight's menu, there is no denying that human beings eat a wide variety of foods. These foods are likely very different from what we would have eaten thousands of years ago in our natural habitats. Likewise, zoo animals have very different diets from their wild counterparts. Many animals in captivity are fed blended mixtures or pellets. Zoologists make every effort to ensure that these personalized diets cater to the nutritional needs of the animals, but are there unintended consequences to choosing meals for animals instead of letting them follow their natural instincts?

### Lions and Tigers and Bears Need to Chew

- 2 Carnivorous animals like big cats and polar bears need to hunt to survive. Many of the behaviors of hunting—stalking, waiting for, and chasing prey—are natural and healthy. Polar bears, for example, mainly eat seals in the wild. A polar bear may wait for days by a hole in the sea ice for a seal to surface for air. In zoos, polar bears and seals are kept far apart to keep the seals safe, so what polar bears eat instead is a processed mixture of meat, fish, and dog kibble. Although this may meet the polar bears' nutritional needs, what effects could this premade mixture have on their dental or psychological health? At the San Diego Zoo, at least, the polar bears are regularly fed cow bones, rabbits, and carrots. The carrots don't provide any nutritional value, but they do help keep the polar bears' teeth clean.
- 3 Big cats, on the other hand, face more risks from being fed processed mixtures. The common diet for big cats in zoos is a ground mixture of horsemeat, vitamins, and minerals. The mush arrives frozen at the zoo, so all the cats need to do is slurp it up. This eliminates the need for them to use their teeth to rip and tear apart their prey. When big cats don't use their teeth, their fangs stay too sharp and can puncture the bones in their upper jaws, which could lead to infection. Researchers at the San Diego Zoo recorded these effects on five cheetahs in a 1986 study. The cheetahs that were given real carcasses were more engaged with their food and were able to use their teeth to rip apart their prey. Those given the processed zoo diet, on the other hand, were less interested in eating and were more at risk for poor dental health. Big cats need more than nutrients in their food: they need something that puts their teeth to work.

