Why is play important? Read the article and answer the questions that follow.

Play, Play Again

by Ellen Braaf

Play puzzles scientists. Why do animals spend time and energy doing silly things that seem to have no purpose?

1 The struggle for survival in nature is deadly serious. What place is there for play, an activity that doesn't help animals eat, grow, or reproduce?

Leopard cubs play rough to develop the strength and skills they will need as adult hunters.

2 And play is risky. Animals can break bones, pull muscles, or get bitten or scratched. Why is play worth the risk? Many scientists believe it's essential for survival—as important as food or sleep. According to animal play expert Marc Beckoff at the University of Colorado, "play is serious business."

Getting Ready for the Adult World

3 Playing lets young animals try out different ways of doing things again and again in a safe environment, where a mistake won't be fatal. Most scientists believe that when animals play, they are practicing skills they'll need later in life. This is why different kinds of animals play in different ways. Young predators, such as wolves, lions, and bears, play by stalking, pouncing, biting, and shaking their heads from side to side. They're honing their skills for when they will run down, catch, and kill prey. When a wolf pup chases its own tail, bites it, and yanks it back and forth, the pup is rehearsing skills it will need one day as a hunter.

4 Prey animals, such as elk, deer, or antelope, play differently. They dash about like crazy, leaping wildly in the air— twisting, turning, twirling. According to biologist John Byers of the University of Idaho, they act like they have "flies in their brains." But these animals are rehearsing skills they'll need one day to escape predators and avoid becoming dinner.

5 During play, animals constantly monitor their behavior to keep play going. If one animal plays too roughly, the play ends. To keep things fun, they often reverse roles. A stronger or dominant animal will lie on its back, assuming a submissive position, while a weaker animal gets to play "boss."

Animals play in different ways. Wolf cubs play at chasing and attacking, while young mountain goats play at leaping and running away.

Taking Risks

6 Animals at play are also training for the unexpected. In play, animals learn about the world around them and their own physical limits. The need to test those limits, and experience unpredictable situations, could explain why animals sometimes seem to prefer play that is a bit dangerous.

7 A study of Siberian ibexes at Brookfield Zoo in Chicago showed that even though half their enclosure was flat and grassy—a perfect place to frolic in safety—the young goats chose to play most of the time on a steep, rocky area where they were much more likely to get hurt. Why did they place themselves in danger?

8 Beckoff believes that such play helps animals develop flexibility—in their minds as well as their muscles—so that they are better prepared to deal with unexpected or uncontrolled events. In the confusion of fleeing a sudden attack by a predator, an ibex may stumble or crash into another member of the herd. But if it has had lots of practice regaining its footing in play, its misstep is less likely to spell disaster.

Playing for Smarts

9 Research shows that smarter animals spend more time playing. Elephants play more than horses. Wolves play more than rabbits. And parrots play more than ducks or sparrows. Smarter animals also play in more creative and complex ways. Not surprisingly, humans and chimpanzees are among the most playful species.

10 Could play actually help the brain grow? Some scientists think so. They believe that play exercises the brain like lifting a weight exercises a muscle. They even call play "brain food." So play on! Your brain will thank you for it.