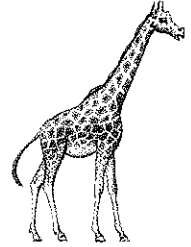


A. Animal Physics Card

A jockey rides her horse to the final hurdle of a competition. At the last minute the horse stops in front of the hurdle instead of jumping over it; the horse's impulse sends the jockey off the horse and into the air.

F. Animal Physics Card

A male giraffe has a large heavy head that is used to strike other males with tremendous force during confrontations.



B. Animal Physics Card

A llama is running at a constant speed while carrying packages on its back. The packages are not tied down to the llama. When the llama makes an abrupt stop, the packages are sent into the air.



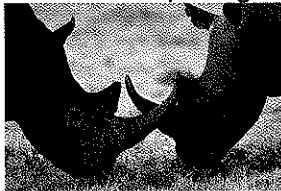
G. Animal Physics Card

A fish swimming through water pushes water backwards with its fins. The water propels the fish forward.



C. Animal Physics Card

Two male rhinos of equal size are competing for a territory. They are pushing on each other with equal force. There is no resolution to the conflict because neither of the two rhinos is more forceful than the other one.



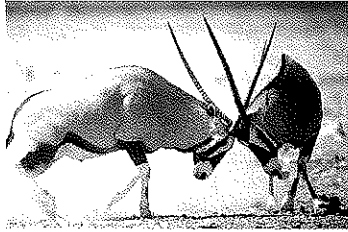
H. Animal Physics Card

An eagle soars through the air by pressing its wings downwards. The air in turn propels the bird upwards.



D. Animal Physics Card

A male antelope tries charging at another slightly smaller male entering his territory. Because the charging male is only slightly larger than the other, he ends up pushing the other male only a slight distance.



I. Animal Physics Card

Two antelopes begin to charge at one another. Once they strike, they both fall backwards with the same force they pushed into each other with. If one pushes on the other, both move, one to due the action and the other due to the reaction force.



E. Animal Physics Card

A mother elephant gently nudges her calf to drink. The mother elephant is careful of the force she is using because she is much larger than her calf.



J. Animal Physics Card

A baby rhino runs playfully at his mother and bumps into her. The baby falls backward from the impact.



Newton's Law Card

Newton's First Law: An object at rest tends to stay at rest and an object in motion tends to stay in motion with the same speed and in the same direction unless acted upon by an unbalanced force.

Newton's Law Card

Newton's Third Law: For every action, there is an equal and opposite reaction.

Newton's Law Card

Newton's Second Law: the acceleration of an object is dependent upon two variable—the net force acting upon the object and the mass of the object. The acceleration of an object depends directly upon the net force action upon the object and inversely upon the mass of the object. For example: as the net force increases so will the object's acceleration. However, as the mass of the object increases, its acceleration will decrease.

