## MARYLAND ZQO

## **Giraffe Spit**



Background: Giraffes spend most of their time feeding. Their extraordinary height allows them to browse on leaves that other grazing herbivores can't reach. A single giraffe can eat well over 100 pounds of food per day. They curl their long, black tongue around leaves or new shoots in the upper branches of trees and pull them into their mouths. They also browse on leaves closer to the ground and may eat fruit and even soil that is rich in minerals. Amazingly, their favorite food is thorny acacias. Giraffes have very thick saliva to protect their mouths from the acacia's large thorns.

*Materials:* Cornstarch, water, bowl, tablespoon, leaves

*Instructions:* Collect the items in the materials list. The leaves can be collected from any plants outside - grass, dandelions, or leaves from a bush or tree will work!

Add 10 tablespoons of cornstarch and 3 tablespoons of water to the bowl. Mix the two ingredients together with your hands. What do you notice about the mixture? Does it stick to your fingers?

Add some leaves to the mixture. Does the mixture easily come off of the leaves if you remove them? The mixture should easily slide off of the leaves. Giraffe saliva functions in a very similar way, coating the giraffe's mouth and tongue and protecting it from the thorns and biting insects that may be living on acacia trees.