Toxins Lesson Plan

Objectives: By the end of the lesson the students will be able to define the meaning of toxin. The students will be able to explain the difference between a poison and venom biologically. The students will be able to describe how some animals use toxins for defense and for catching prey in the wild. Students will be able to describe the positive affects toxins are having on humans because of medical research.

Grades: K-8 (With Adaptions for High School Students)

Materials:

1. Food Coloring Red and Black
2. Eye Droppers
3. Vile of Water
4. Animals from the Toxins Unit

Introduction:

 The educator will start the lesson by asking the students to think about an animal that is dangerous because of their bite or their sting? They will talk to the students about how this because of toxins they have in their body.

Lesson:

After the introduction the educator will define the meaning of the term toxin. They will talk about how many animal species are built in with toxin chemicals in their bodies for many reasons. The educator will describe the differences between a poison and a venom in an animal biologically but stating how they are both considered toxins. Then the educator will talk about the reasons that animals have these toxins, specifically describing the defense reasons for poisons and predatory reasons for venoms. Then the educator will describe the animal stat animals of using these toxins in their bodies, from stinging, biting, excretion, and etc. The educator will then use the food colors and the vile of water to show how toxins affect other animals when they enter their body. Then the educator will bring out the animals from this unit and talk about the toxins they produce. Discuss the levels of toxicity and danger of each and why they have these toxins in the body in general.

Wrap Up:

When the animals are away the educator will talk with the students about how humans are now using venom in research to people with medical conditions and over all good for humanity.