Anatomy of an Earthworm

Objective/Purpose
This activity helps the students understand how earthworm and human anatomy differ. The students have a generalized concept of how things work in the human body. The earthworm activity allows them to comprehend that different organisms may have the same organs, but differ in certain ways. The follow up activity allows the students to incorporate the information they have learned about both the anatomy and habitat into a creative and edible treat.

Material/Time required
- Earthworm facts (can be collected from the internet or books)
- Diagram of an earthworm
- The book “Diary of an Earthworm” by Doreen Cronin
- 2 earthworms: 1 live and 1 dead
- Ground up Oreo cookie
- Gummy worms
- Chocolate pudding
- Marshmallows

Background Information
Before beginning the activity, we did a brief overview of the ecology of the Chattahoochee River. We learned about the different organisms that call the Chattahoochee home, including the earthworm. After the description of the earthworm’s habitat, we then took a closer examination on how the anatomy of an earthworm enables it to live in its habitat. Doreen Cronin’s book “Diary of an Earthworm” incorporates much of this information with colorful illustrations.

Preparation
The only necessary preparation was waiting for a rainy day to collect earthworms. I collected a live one and a few days later went and found one that had dried up. An alternative could be to go buy some at a tackle shop, but I only needed two worms. The worksheets were created in Microsoft Word and materials were bought for the treat.

Safety
The only safety concern was ensuring that the children did not have any known allergies to any of the food for the treat.
Procedure

- Read information about an earthworm including habitat, anatomy, and functions of organs.

- Read the book “the diary of an earthworm” for more vivid and entertaining depiction of information just learned.

- Have the children label the anatomy of an earthworm including the mouth, five hearts, crop, gizzard, and intestines on the diagram

- Compare the live earthworm to the dead one. Point out key ideas such as the moisture that is needed for an earthworm to survive.

**Before preparing the treat, make the children think they are about to eat real earthworms. This gets an entertaining reaction.**

- As you make the tasty earthworm habitat, prompt the students with questions. For example, “What does an earthworm need to live in?” The answer could be dirt and as you go to get the “dirt” show the students the crushed Oreos.

- After they have finished the treat, let them compare their edible habitat to a real one.

Assessment

To ensure that the students grasped the materials and ideas that were presented to them, we did a small presentation for their teacher. First, I asked the students what was the main focus of our activity. I then referred to the anatomy worksheet and asked the class the function of each organ. Next, we went through the essential elements of an earthworm’s habitat and why they were important for its survival. Finally, we once again made the comparisons between the edible habitat and the real one.