



DIY ACTIVITY

MAKE A HOMEMADE MODEL OF THE DIGESTIVE SYSTEM

GRADES 3-5

OBJECTIVES

- Model how the digestive system works to break down food into smaller pieces.

PROCEDURE



WATCH THE GENERATION GENIUS HUMAN BODY SYSTEMS VIDEO AS A CLASS

1. Take two slices of bread and break them up in a bowl
2. Add water to the bowl containing the bread
3. Pour orange juice over the bread
4. Using your hands, break up the bread, water, and orange juice mixture
5. Stuff the sock into the cup
6. Fold the end of the sock over the cup's edge
7. Pour the mixture into the sock and squeeze the sock, making sure it is directly placed over the bowl. (Note: the liquid contents in this mixture should squeeze out of the sock and drain into the bowl.)

MATERIALS NEEDED

- Two slices of bread
- Bowl
- A cup
- Orange juice
- Water
- White sock

Activity Duration: 45 minutes

WHAT IS GOING ON HERE?

The body must break down food into smaller pieces before it can be digested. The first step in this breakdown of food takes place in the mouth. The process is called chewing. When a person puts food in their mouth, the physical process of chewing helps break the food down into smaller pieces. Saliva, which contains proteins called enzymes, is secreted in the mouth. As this watery substance mixes with the chewed food, the enzymes can break down the food even more. All of this makes it easier for food to be readily digested in the body.

FURTHER EXPLORATION

Think about why it is important to chew your food. If chewing is a physical process of digestion what type of process do you think the release of saliva in the mouth is? (a chemical process of digestion) Why is it important to begin digestion in the mouth? (Chewing in the mouth is the first place where food is broken down to smaller pieces. It must be in smaller pieces to be digested. This enables the body to absorb any nutrients from food.) In your science notebook, describe the process of digestion. Explain why this process is important to the overall body. Include one example of where the digestive system might work with another body system to help the body function properly.