

North Shore Science League
Biology Event — December Meet
Chelsea High School

The Digestive System

This will be a paper and pencil event for which you must study in advance. The event will consist in answering 50 questions about the human digestive system. The questions will be distributed among 25 stations, with two questions per station. Students will move from station to station to answer the questions; there will be a set time limit (of 1 minute) that students can spend at each station. Some questions may be multiple choice; some will require students to answer with a word or phrase. Some questions may include pictures, graphs or specimens that students must interpret or identify in order to answer the question correctly.

Topics covered include: Parts of the digestive system; types of cells found in it; functioning of the digestive system; diseases of the digestive system, including parasites; common medical procedures performed on the digestive system; embryologic development of the digestive system; evolutive history of the digestive system.

Resources: To prepare for this event, students can consult any high school biology book; *Gray's Anatomy*; *Human Anatomy and Physiology* by E. Marieb; articles in recent issues of scientific magazines (like *Discover* or *Scientific American*). **No textbooks, articles, or other resources will be allowed at the event.**

Sample questions:

1. Which is the name of the sphincter connecting the stomach to the small intestine?
Answer: Pyloric sphincter
2. Which disease is caused by the parasite *Entamoeba*?
Answer: Amoebic dysentery
3. In which of the following parts of the digestive system are foods most likely to be absorbed into the bloodstream?
 - a. The esophagus
 - b. The stomach
 - c. The small intestine**
 - d. The colon

Questions can be posted at the website, and will be answered promptly.