Structure and Function

Summary
Students will use a heart and a flower to relate the structure of an organ to the function of the organ.

Main Core Tie
Science - Biology
Standard 3 Objective 1

Time Frame
1 class periods of 60 minutes each

Group Size
Small Groups

Materials
- student sheet
  (attached)
  Shoes of different types (sandal, athletic, dress, hiking boot)
  optional: real flower or heart or movie of heart beating

Instructional Procedures
Start by making sure students understand what is meant by "structure" and "function". Use the shoes to ask how the structures of each shoe determine its function. Make sure students are clear on this before going on.
If a video is available, show the clip of the heart beating or if you have an example of a heart or a flower, show it to the students and ask if it is just an accident how they look. Hopefully, students will realize that there is a reason for the structure of an organ.
Work with the students to write a detailed description of what a part of the heart (ex: the coronary arteries) look like, using a real heart or a diagram. The description should include size, shape, surface texture and suppleness. Then have the students describe why these characteristics help the coronary arteries do their job.
Instruct students to fill in the data table for each organ part and decide how that helps their function. Suggest that they use their textbooks to help.
If available, provide each student group with a flower to dissect. They can carefully describe each part as they remove it from the flower.

Bibliography
Lesson Design by Jordan School District Teachers and Staff.

Authors
Utah LessonPlans