VR Pig Dissection: Hoggin' The Scalpel

Teacher Support Page

Program Contents

INTRODUCTION

Running Time: 10 minutes
- Wendy's welcome
- Controls/Functionality

EXTERNAL FEATURES

Running Time: 12 minutes

SYSTEMS

Running Time: 83 minutes
- Skeletal: 9 minutes
- Muscular: 9 minutes
- Digestive: 22 minutes
- Urogenital: 12 minutes
- Circulatory: 12 minutes
- Respiratory: 11 minutes
- CNS: 8 minutes

TOTAL RUNNING TIME: 105 MINUTES

The Importance Of Dissection

Dissection labs excite students and motivate them to ask probing questions about anatomical structures and processes, to identify patterns across species, and to relate structure to function. When students reach high school, dissections can be used as evidence for model building and as empirical evidence to support theories. Dissection of a small mammal is a hands-on approach for students to gather information on organs and organ systems necessary to develop a model of interacting systems that is also applicable to larger mammals, such as humans.

NGSS: Next Gen Science Standards

DISCIPLINARY CORE IDEA

LS1.A: STRUCTURE AND FUNCTION: Multicellular organisms have a hierarchical structural organization, in which any one system is made up of numerous parts and is itself a component of the next level.

LS4.A: EVIDENCE OF COMMON ANCESTRY AND DIVERSITY: Genetic information, like the fossil record, provides evidence of evolution. DNA sequences vary among species, but there are many overlaps; in fact, the ongoing branching that produces multiple lines of descent can be inferred by comparing the DNA sequences of different organisms. Much information is also derivable from the similarities and differences in amino acid sequences and from anatomical and embryological evidence.

PERFORMANCE EXPECTATION

HS-LS1-2: Develop and use a model to illustrate the hierarchical organization of interacting systems that provide specific functions within multicellular organisms.