Teacher’s Play: Follow-up Questions

Directions: Answer the following questions based on the play. Be prepared to read the play and/or share answers to the questions with the whole class.

1. What is the important observation that Luigi made during his experiment?
The main observation is that the dissected—i.e., dead—frog’s leg moved as if it were alive when it came in contact with the metal scalpel with electrical charge.

2. Why is that observation significant? And what conclusion did Luigi draw from it?
The significance of the observation is that the dead frog’s leg moved as if it became alive. Luigi thought that the animal bodies must intrinsically produce electricity as a life force.

3. How is Luigi’s observation and conclusion reflected in the Frankenstein film and novel excerpts you have viewed and read?
In the film, the lifeless creature is raised out into the thundering sky and electricity/lightning is used before the creature shows a sign of life—moving fingers.

In the excerpts from chapters 2 and 5 of the novel, Dr. Frankenstein became fascinated with lightning and electricity, which he studied and applied to his work of bringing to life a creature that is put together. There is no direct use of electricity in bringing to life his creature in the novel. However there is a metaphoric reference to electricity in the way that Dr. Frankenstein describes his work—i.e. “that I might infuse a spark of being into the lifeless thing that lay at my feet.”

4. According to how Mr. Frog explains the relationship between the body and electricity, would you agree with Luigi’s hypothesis that electricity is the life force? Why or why not?
Mr. Frog says that the body does not generate electricity like a generator, but a small amount of electrical activity. Given this understanding, students should disagree with Luigi’s hypothesis. Nevertheless, his experiment paved the way of developing electrophysiology field where electrical activities are measured to assess well being—e.g., EKG; electrical currents are applied to mimic brain’s chemical signals to stimulate muscles—e.g., pace makers, electronic prosthetics.

5. List at least one question about Luigi, Alessandro, or electricity that you want to know more about.
Students’ responses can be used to assess their interests and possible extension activities that teachers may assign. See Extension Activities section of the Lesson Plan.

http://www.nlm.nih.gov/frankenstein