Main Ideas, Key Points, Questions:

After watching the video segment, write down key points, main ideas, and big questions.

Objective(s):

- Calculate the work done on an object and its change in energy.
- Apply the work-energy theorem to an object that experiences a net external force.

Notes:

During the video segment, use words, phrases, or drawings to take notes.

Summary:

After watching the video segment, write at least three sentences explaining what you learned. You may ask yourself: “If I was going to explain this to someone else, what would I say?”
Answer the following.

1. Define the physics quantity of work in your own words.

2. When work is done on an object, it changes the object's ____________________________.

3. What is the unit of work?

4. What is the unit of energy?

5. How is work related to force and displacement?

6. How is work related to kinetic energy?

7. How does friction affect the kinetic energy of an object?

8. How does the direction of friction compare to an object's direction of motion?

9. Based on the previous two questions, does friction do positive or negative work? What does this mean for the energy of an object?