

➤ Main Ideas, Key Points, Questions:

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

➤ Objective(s):

- *Calculate the kinetic energy of an object.*
- *Calculate the gravitational potential energy of an object relative to a reference point.*
- *Understand how gravitational potential energy is converted to kinetic energy and vice versa.*

➤ 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 kinetic energy in your own words.

2. What must an object be doing in order to have kinetic energy?

3. What is the equation for kinetic energy?

4. Kinetic energy is measured in what unit?

5. Define potential energy in your own words.

6. One type of potential energy is gravitational potential energy. What is necessary for an object to have gravitational potential energy?

7. What is the equation for gravitational potential energy?

Answer the following.

8. What happens to an object's gravitational potential energy as it falls from some height?

9. What happens to an object's kinetic energy as it falls from some height?

10. Define energy in your own words.

11. Can an object have both kinetic energy and gravitational potential energy? Explain.
