

**Science 9**  
**Unit D: Electrical Principles and Technologies**  
**Lesson 10**  
**Practice Worksheet 45: Energy Skate Park Basics**

---

Complete the following questions with the help of the Energy Skate Park simulation. You will find the link for the simulation in the online course.

---

**Instructions for Using Simulation**

1. On the "Intro" version of the simulation, click the bar graph option on the far right-hand side.
  2. Select the second track on the lower right-hand side.
  3. You will need to drag the skater to the top of the track and let go. Watch the skater travel from the top to the bottom. Run the simulation a few times (click "restart skater"), and note what happens to the potential and kinetic energy as the skater goes down the slope.
- 
- 

**Question 1**

Look at the third column in the bar graph. What do you notice about the total energy?  
(Hint: The total energy is the mechanical energy.)

---

---

**Question 2**

What happens to the potential energy as the skater travels from the top of the ramp to the bottom?

---

**Congratulations! You have completed this practice worksheet.**

Now it's time to carefully compare your answers to the suggested answers in the online course. When comparing, you should feel free to make changes to your answers or make extra notes.

**Keep this practice worksheet for study purposes.** Using practice worksheets as a study tool to review for exams is a great idea.

**If you unsure about any of the questions or answers, or you just want more feedback, share this practice worksheet with your teacher and ask for assistance.** You can do that by emailing the teacher, or by submitting it in the Course Questions Forum in the online course. If you are using this practice worksheet in Google Drive, don't forget to change the sharing settings so that anyone can view it before sending the link to your teacher.

---