

Talking Drawing: Roller Coaster Energy

1. Close your eyes and think about *what energy transformations happen during a roller coaster ride*. Now, open your eyes and draw what you imagined. Label any parts of the roller coaster that have special features.

2. After reading Activity 55, "Roller Coaster Energy" use the back of this page to draw and label a new picture of what you imagine energy transformations happen during a roller coaster ride.

3. In the space below, tell what you changed in your before and after pictures.

ANALYSIS

1. Look at the diagram of a roller coaster below. At which point does a train on this roller coaster:
 - a. have the most gravitational potential energy? Explain your choice.
 - b. have the most kinetic energy? Explain your choice.
 - c. have both kinetic and gravitational potential energy? Explain your choice.
2. Kinetic energy is related to the speed of an object. In which place, Point E or Point F, is the train moving faster? Explain in terms of kinetic energy.
3. As the train travels on the track, the energy of the train changes back and forth from gravitational potential to kinetic. What other energy transformations occur as the train travels the track? Explain.

