

ENERGY ADI BACKGROUND RESEARCH

What is energy? Does energy exist in different forms? Can you see or feel energy? Use the Potential and Kinetic energy quesr links on my websites class resource tab to become an energy expert!

A. Click on the Energy types link and Answer these questions:

1. What are the 2 main types of energy?
2. Give an example of kinetic energy.
3. Give an example of potential energy.
4. Name 5 other types of energy.

B. Click on the Falling Rhino link and Answer these questions:

6. Based on its height above the ground, the rhino possesses _____
7. During the Rhinos fall most of the potential energy is converted into _____ and a small amount of _____.
8. Upon impact, the Kinetic Energy is converted into what 3 forms of energy?
1. _____ 2. _____ 3. _____
9. After the fall the Rhinos energy remains _____.

C. Click on the Falling Rhino link and fill in the table. List 2 examples of Potential and Kinetic energy from the list AND 3 THAT ARE YOUR OWN IDEAS NOT FROM THE KEY NOTE OR LIST!

	Potential Energy	Kinetic Energy
1		
2		
3		
4		
5		

D. Go to the Amusement park physics link follow the instructions below to create your own roller coaster

- a. Click "Begin".
- b. Select the "Height of the First Hill".
- c. Then click "next piece".
- d. Select the "Shape of the First Hill".
- e. Then click " next piece: exit path".
- f. Select the " Exit Path".
- g. Then click " next piece".
- h. Select the " Height of the Second Hill".
- i. Then click "next piece".
- j. Select the "Loop".
- k. Click " See Your Roller Coaster".
- l. Draw your roller coaster in your notebook. Label the points where GPE and KE occur. What were your safety ratings? What was your fun rating?

Click on " your safety inspections" and record in your notebook whether or not your roller coaster passes safety inspections. Summarize each step's explanation of your ratings.

E. Watch the video at the snowboarding link and explain how potential and kinetic energy are used by snowboarders

F. Open the ADI link and read the ADI

G. Write section 1 of the ADI following the writing guide using material from your webquest and from the textbook material link