**ENERGY WEBQUEST**

**Assessment**

1. "Energy cannot be created nor destroyed in any chemical reaction. It can only be changed from one form to another." This is known as the Law of:

A. Energy Transformation

B. Conservation of Energy

C. Energy Transfer

2. During energy transformation, energy is never \_\_\_\_\_\_\_\_\_\_\_\_.

A. used to increase an object's potential energy

B. released as heat

C. created or destroyed

3. As energy transformations occur within a system, the total energy of the system \_\_\_\_\_\_\_\_\_.

A. remains constant

B. decreases

C. increases

4. Which of the following objects has kinetic energy?

A. a ball rolling across the floor

B. leaves lying on the ground beneath a tree

C. a bicycle parked at the top of a hill

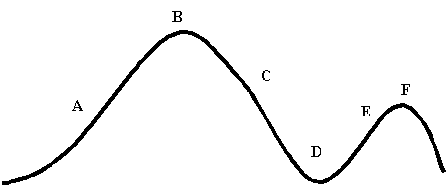
5. \_\_\_\_\_\_\_\_\_\_\_\_\_\_ is the energy stored in an object due to its position.

A. Kinetic energy

B. Thermal energy

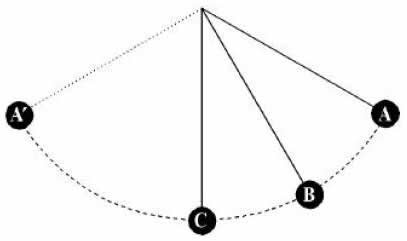
C. Potential energy

1. The diagram below shows a roller coaster. Use this diagram to answer the next question.

  
(From: [http://galileo.phys.virginia.edu/education/  
outreach/8thgradesol/EnergyPendulum.htm](http://galileo.phys.virginia.edu/education/outreach/8thgradesol/EnergyPendulum.htm" \t "_blank))

At what point in the journey of the roller coaster is potential [energy](javascript:void(window.open('../terms/mid/full/e/energy.htm','','scrollbars=yes,width=500,height=600'))) transforming into kinetic [energy](javascript:void(window.open('../terms/mid/full/e/energy.htm','','scrollbars=yes,width=500,height=600')))?

1. Point A
2. Point B
3. Point C
4. Point D

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**(**From:[http://albertgrasmarti.org/agm/recerca-divulgacio/pendulum-TPT.pdf](http://albertgrasmarti.org/agm/recerca-divulgacio/pendulum-TPT.pdf" \t "_blank)**)**

In the figure above

* 1. position A is the point of maximum potential [energy](javascript:void(window.open('../terms/mid/full/e/energy.htm','','scrollbars=yes,width=500,height=600'))) and minimum kinetic [energy](javascript:void(window.open('../terms/mid/full/e/energy.htm','','scrollbars=yes,width=500,height=600'))).
  2. position B is the point of maximum potential [energy](javascript:void(window.open('../terms/mid/full/e/energy.htm','','scrollbars=yes,width=500,height=600'))) and minimum kinetic [energy](javascript:void(window.open('../terms/mid/full/e/energy.htm','','scrollbars=yes,width=500,height=600'))).
  3. position A is the point of maximum kinetic [energy](javascript:void(window.open('../terms/mid/full/e/energy.htm','','scrollbars=yes,width=500,height=600'))) and minimum potential [energy](javascript:void(window.open('../terms/mid/full/e/energy.htm','','scrollbars=yes,width=500,height=600'))).
  4. position B is the point of maximum kinetic [energy](javascript:void(window.open('../terms/mid/full/e/energy.htm','','scrollbars=yes,width=500,height=600'))) and minimum potential [energy](javascript:void(window.open('../terms/mid/full/e/energy.htm','','scrollbars=yes,width=500,height=600'))).

1. Below is a figure of a pendulum. The letters represents specific points that the pendulum passes through in its swing. Use this figure to answer the next question.

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**(**From:[http://albertgrasmarti.org/agm/recerca-divulgacio/pendulum-TPT.pdf](http://albertgrasmarti.org/agm/recerca-divulgacio/pendulum-TPT.pdf" \t "_blank)**)**

In the figure above, the letter representing the point where kinetic [energy](javascript:void(window.open('../terms/mid/full/e/energy.htm','','scrollbars=yes,width=500,height=600'))) and potential [energy](javascript:void(window.open('../terms/mid/full/e/energy.htm','','scrollbars=yes,width=500,height=600'))) are equal is

1. Point A
2. Point B
3. Point C
4. Point A'