

ENERGY

Mechanical Energy



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GRADES 5 - 8

Reading Levels 3 - 4

SAMPLE



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ISBN-13: 978-1-55319-372-2

ISBN-10: 1-55319-372-5

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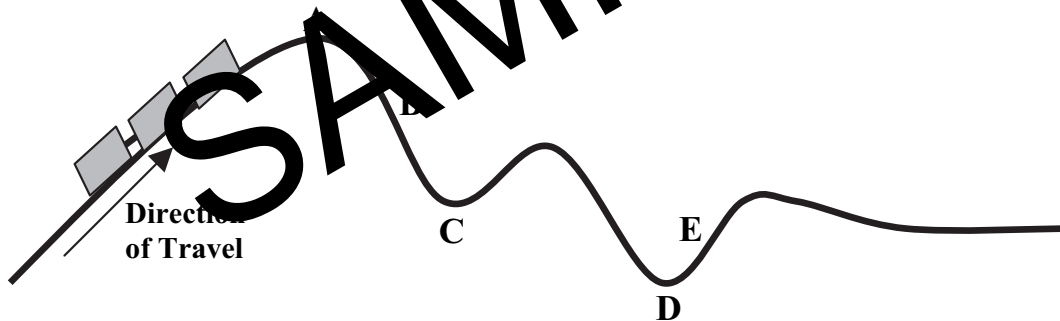
Mechanical Energy



1. Circle **T** if the statement is TRUE or **F** if it is FALSE.

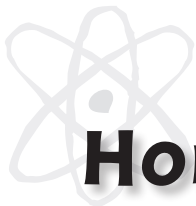
- T F a) The faster an object moves, the more potential energy it has.
- T F b) Anything that could be lifted off the ground has potential energy.
- T F c) A stretched spring has potential energy.
- T F d) Water gains kinetic energy after it goes over a waterfall.
- T F e) Wind has kinetic energy.

2. Part of a roller coaster is shown below.



Five points on the roller coaster ride are shown. Answer each question by writing A, B, C, D, or E.

- a) At which point is the roller coaster gaining kinetic energy? _____
- b) At which point is the roller coaster gaining potential energy? _____
- c) At which point does the roller coaster have the most kinetic energy? _____
- d) At which point does the roller coaster have the most potential energy? _____



Home Is Where the Energy Transformations Are

Find out about the energy transformations taking place in your home.

Choose **FIVE** things from this list:

- TV, Radio, or Stereo
- Toaster
- Microwave oven
- Gas range or oven
- Charcoal grill
- Electric range or oven
- Electric fan
- Matches or a candle
- Telephone
- Cell phone

SAMPLE

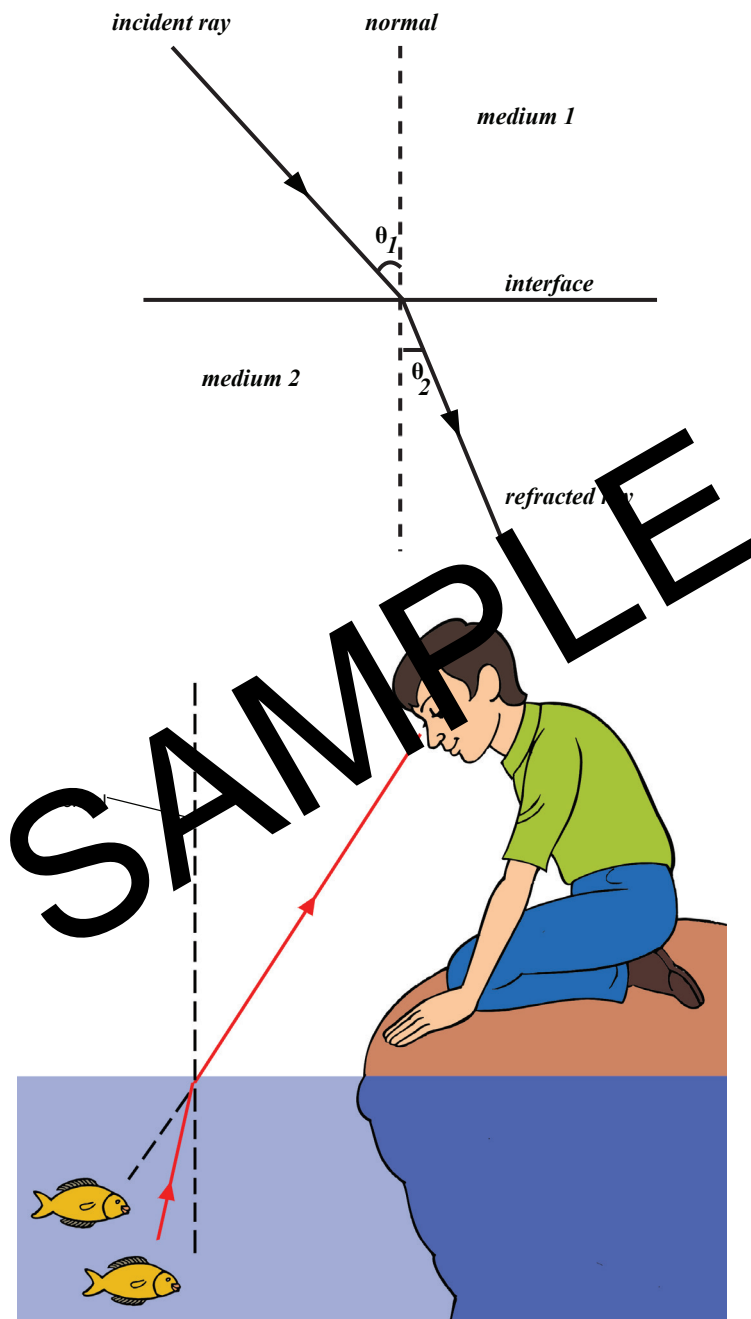
For each of the five things you choose, answer these questions:

1. What form of energy does the thing use?
2. Is the energy transferred from outside the home or is it already stored in the thing itself?
3. What energy transformations take place when you use the thing? Try not to miss any.
4. Does it transform any energy into a form you don't really need or want?

Use a chart like the one below to record your answers.

Item	Energy used	Energy transferred?	Energy transformations	Energy created that is not needed?
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Refraction



A diagram of how light travels with rays and angles labeled and another picture of how refraction changes our perception.