

## Energy Storage and Transfer Model Worksheet 1a: Qualitative Analysis - Pie Charts

Use pie charts to analyze the energy changes in each situation given.

- Designate your choice of system with a dotted line. Choose your system so that the energies involved are internal (within the system).
- Carefully label the pies to correspond with the positions of the objects given. (A, B, C, etc.)
- The pies should be accurately divided and labeled with the energy storage mechanisms involved.
- Remember the 3 energy questions in deciding about the energy changes:
  1. Where does the energy come from? (What's the source of the energy?)
  2. What does the energy do?
  3. Where does the energy go?

1. A wind-up toy is fully wound and at rest.



2. A wind-up toy is wound up and moving across level ground. The toy is speeding up.



3. The toy is wound up and is moving at a constant speed up an incline.



4. The toy is wound up and moving along at a constant speed.



5. The toy is wound up and slowing down as it moves up an incline.



6. The toy is wound up and speeding up as it moves up an incline.

