Name: _____

Energy Transferred Across the System Boundary

Use Energy Pie Charts to describe the system. Include all objects and interactions in your System Schema.

1) A train is at rest. Superman pushes the train, starting at rest, giving the train a constant acceleration. Consider the situation during the time that Superman is pushing the train only.

    (a) Make energy pie charts for this situation when everything is in your system

    (b) Make energy pie charts for this situation when the train is the only object in your system

2) Now a train is speeding down a track with a constant velocity. Superman gets in front of the train and slows the train to a stop. Consider this situation from the time Superman starts slowing the train down until the train comes to a stop. Make the train the only object in your system.