

Name \_\_\_\_\_ Period \_\_\_\_\_

### Physics 9 Energy Quiz 3

1. A lever is 1.73 m long and has a fulcrum 0.42 m from the end. A box that weighs 623 N is on the short end of the lever.

1. What is the mass of the box?
2. What is the MA?
3. What force is needed to lift the box (effort force)?

2. You pedal your bike up a hill. When you get to the top you coast down the other side. Describe the energy changes for you and your bike, starting with the food energy you ate for lunch until you are at the bottom of the hill.