Virtual Lab
Activity 9.2

Benefits of Machines

1. **Observe** Watch the example of how a first-class lever achieves mechanical advantage. In the example, the mechanical advantage is resistance force (Fr) divided by effort force (Fe). If an effort force of 10 pounds lifts 1 pound, what is the mechanical advantage?

2. **Execute** Sketch a first-class lever. Then, based on your first sketch, draw a simple lever for lifting 25 pounds. Write the equation for the mechanical advantage you might achieve with this lever.