



NAME: \_\_\_\_\_

## Mechanical Advantage Worksheet 6A

Mechanical advantage is a way of measuring how much a machine can amplify force, such as allowing us to move a heavy load, such as with a wheelbarrow or using a rope and pulley system or a ramp. In this unit we are going to focus on the difference between **input force** and **output force**.

Think of an example of a simple machine at school or at home that you see or use every day. Use that example to answer the following questions:

1. What object did you think of?
2. What type of simple machine is it?
3. How does this object increase your output force?

Draw it below and label the parts of the simple machine.

Using Google Chrome, go here: <http://cosi.org/downloads/activities/simplemachines/sm1.html>  
 You will see illustrations of each of the simple machines. I need you to click on each one and draw the machine, list an example, and write in the formula for calculating Mechanical Advantage (MA).

	<b>Drawing</b>	<b>Example</b>	<b>Formula (MA = ?)</b>
<b>Inclined plane</b>			<b>MA =</b>
<b>Wedge</b>			<b>MA =</b>
<b>Screw</b>			<b>MA =</b>
<b>Lever</b>			<b>MA =</b>
<b>Wheel &amp; Axle</b>			<b>MA =</b>
<b>Pulley</b>			<b>MA =</b>