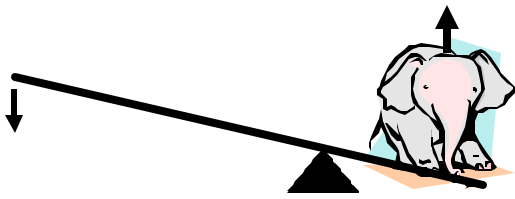


Name: \_\_\_\_\_

Period: \_\_\_\_\_

HW—4:2 — Simple Machines  
Mr. Murray, IPC  
www.aisd.net/smurray

Assigned: Tues., 2/10/04  
Due: Thurs., 2/12/04



What class of lever is this?

Label on the picture these five things:  
 $F_{in}$ ;  $F_{out}$ ;  $D_E$ ;  $D_R$ ; fulcrum

Will this lever increase or decrease force?

<u>Input or Output Force?</u>
_____ A lever applies 40 N of force.
_____ You pull with 10 Newtons.
_____ You lift a 20 N rock with a lever.
<u>Distance of Effort or Resistance?</u>
_____ how far down you pull the lever.
_____ how far up the object moves
_____ From the fulcrum to the object.

You pull on the lever 60 cm from the fulcrum. The object is 10 cm from the fulcrum. Find the MA.
$F_{out} =$
$F_{in} =$
Equation =
Answer =

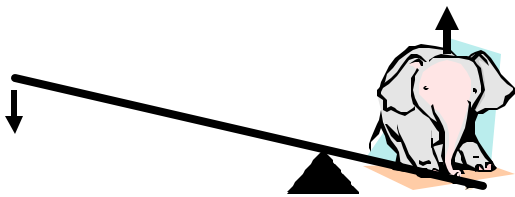
**Work on back**

Name: \_\_\_\_\_

Period: \_\_\_\_\_

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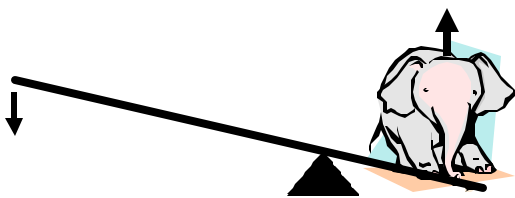
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Period: \_\_\_\_\_

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**Work on back**

Name: \_\_\_\_\_

**Don't forget the front side**

HW 4:1

Period: \_\_\_\_\_

Draw a third class lever. Show input and output forces and fulcrum.

You apply 20 N of force to a lever. The MA is 0.5. How much can you lift?

Fout =

Fin =

Equation =

Answer =

Name: \_\_\_\_\_

**Don't forget the front side**

HW 4:1

Period: \_\_\_\_\_

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You apply 20 N of force to a lever. The MA is 0.5. How much can you lift?

Fout =

Fin =

Equation =

Answer =

Name: \_\_\_\_\_

**Don't forget the front side**

HW 4:1

Period: \_\_\_\_\_

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Fin =

Equation =

Answer =