



# **LEVERS**

# **MUSCULAR SYSTEM**

# SIMPLE MACHINE - makes work easier.



lever



wedge



wheel  
and axle



pulley



inclined  
plane



screw

# LEVERS

\*USED IN BOTH SIMPLE MACHINES AND HUMANS.

◆ TO LIFT UP WEIGHT MORE EASILY.

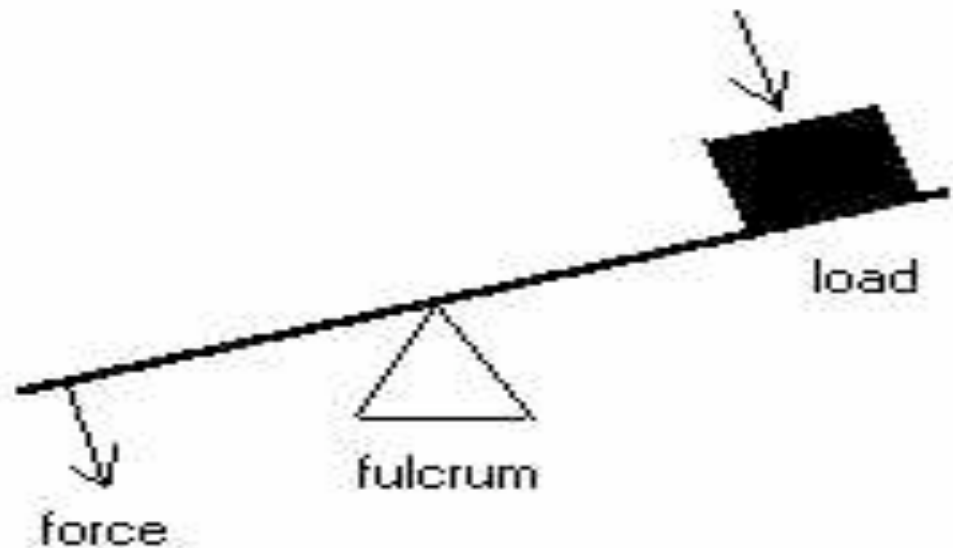
◆ DONE WITH LESS EFFORT.

# **PARTS OF A LEVER**

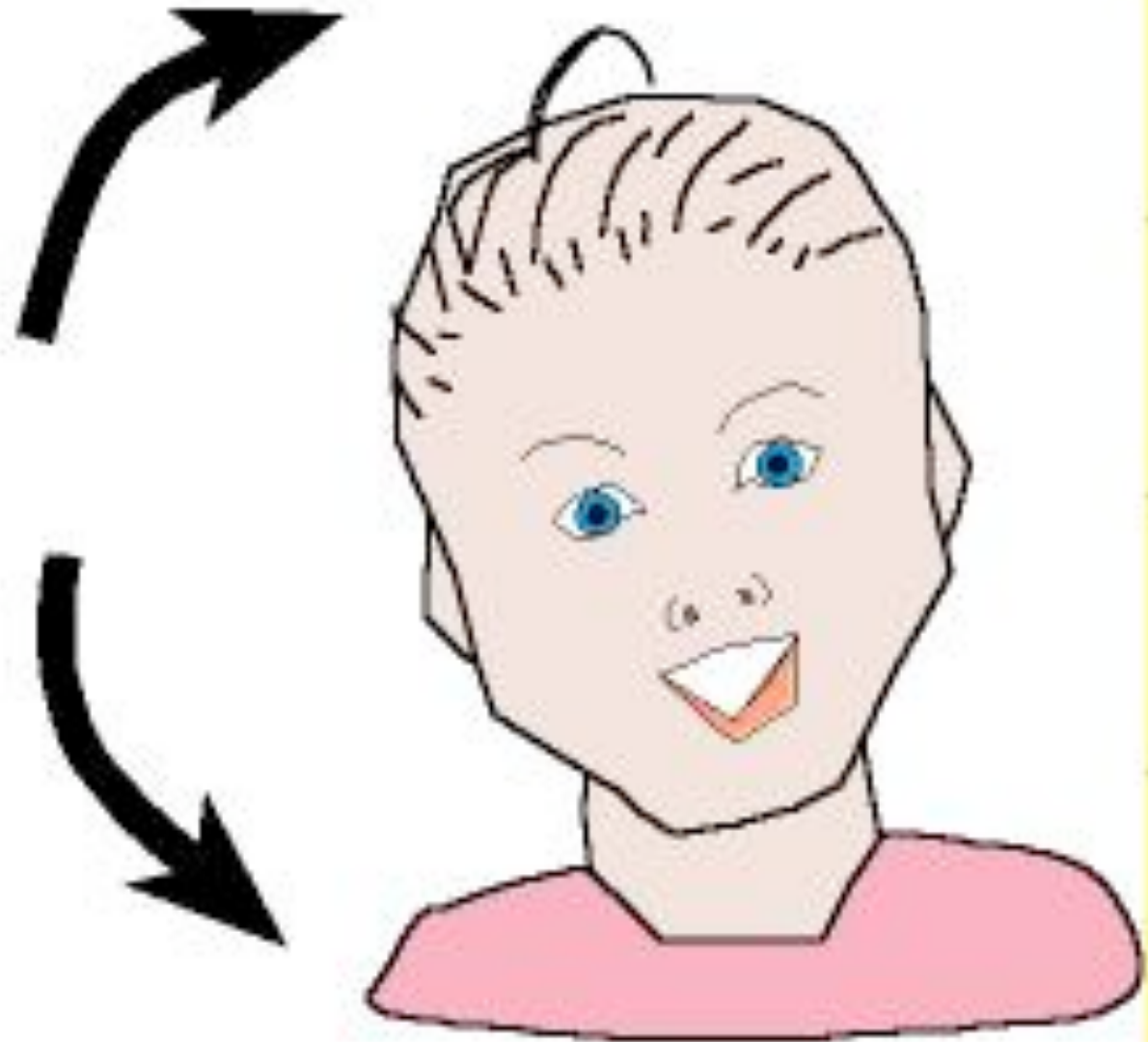
- 1. LEVER**- bar which action performs upon
- 2. FULCRUM**- fixed point lever based on
- 3. LOAD**- weight of part/object being lifted
- 4. EFFORT**- force applied to lift load

# FIRST CLASS LEVER

◆ FULCRUM IN THE CENTER,  
WITH LOAD AND EFFORT AT  
OPPOSITE  
ENDS.

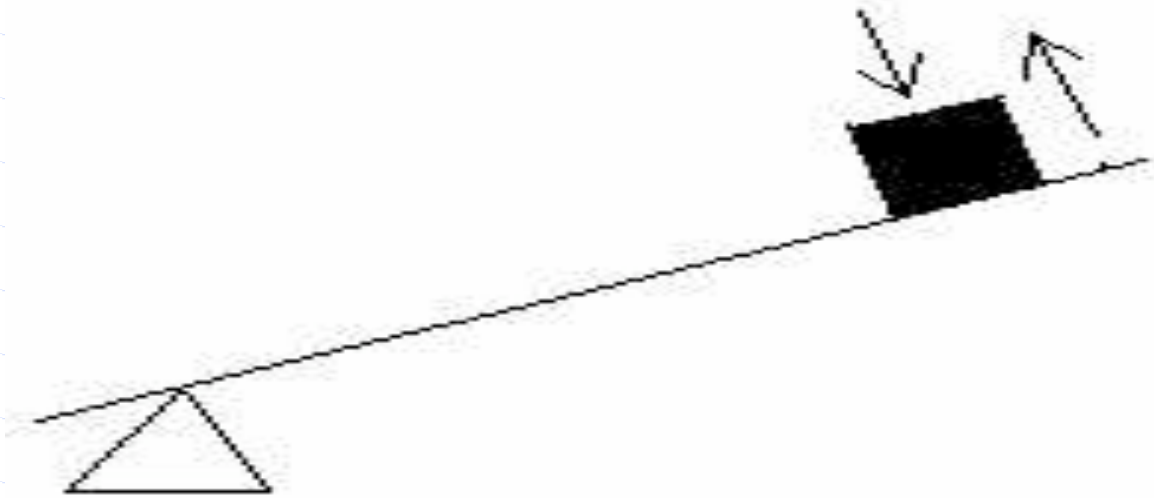


# CLASS 1



# SECOND CLASS LEVER

- ◆ LOAD IS IN THE CENTER, WITH FULCRUM AND EFFORT ON OPPOSITE ENDS.

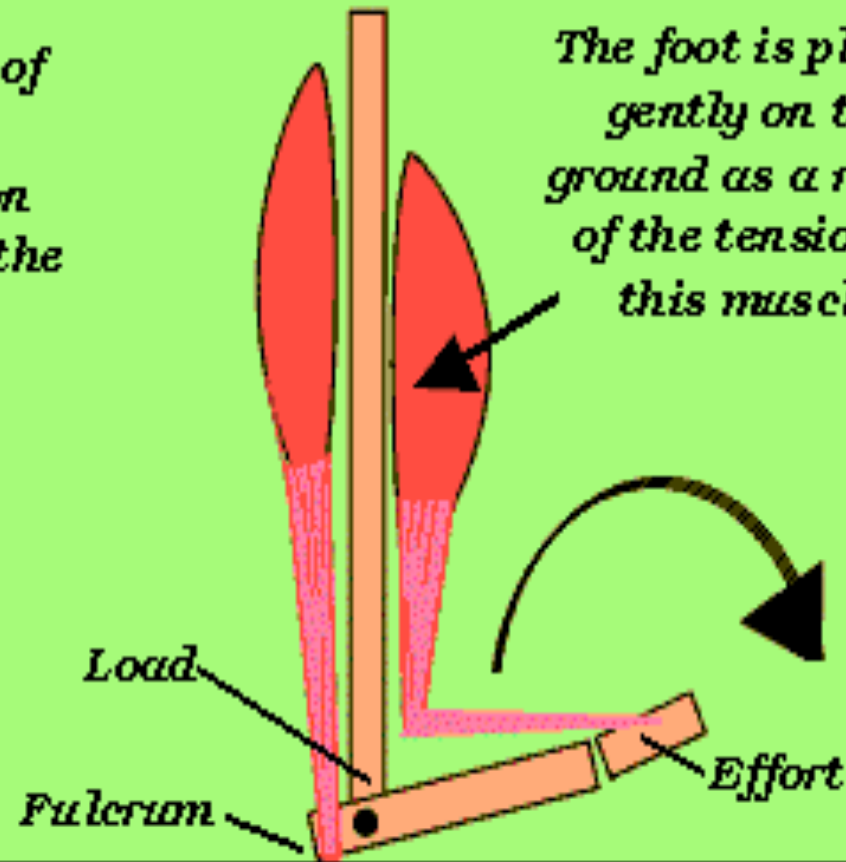


# The foot

## Stage "B"

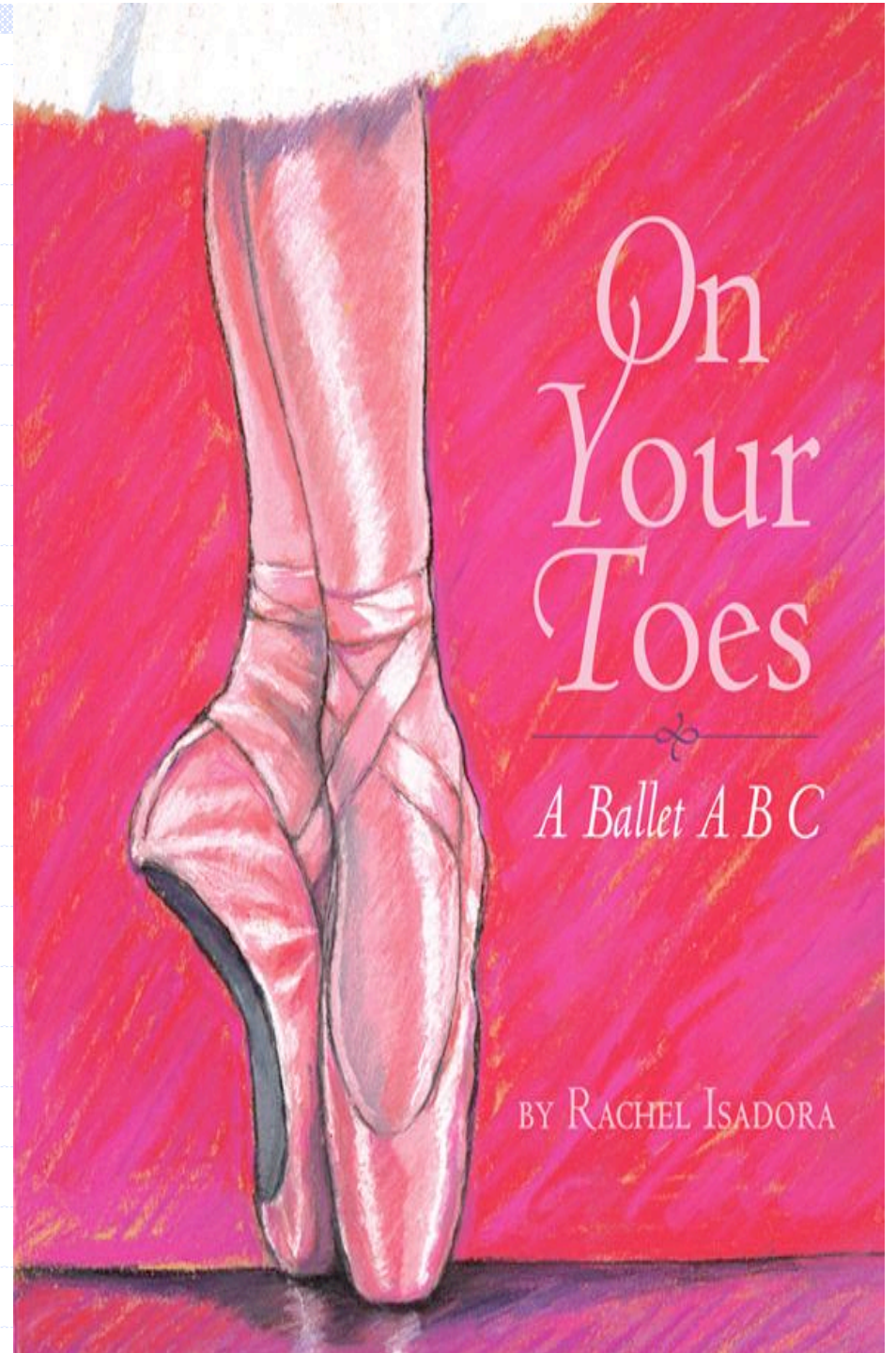
*A great deal of force is generated on impact with the ground.*

*The foot is placed gently on the ground as a result of the tension of this muscle.*



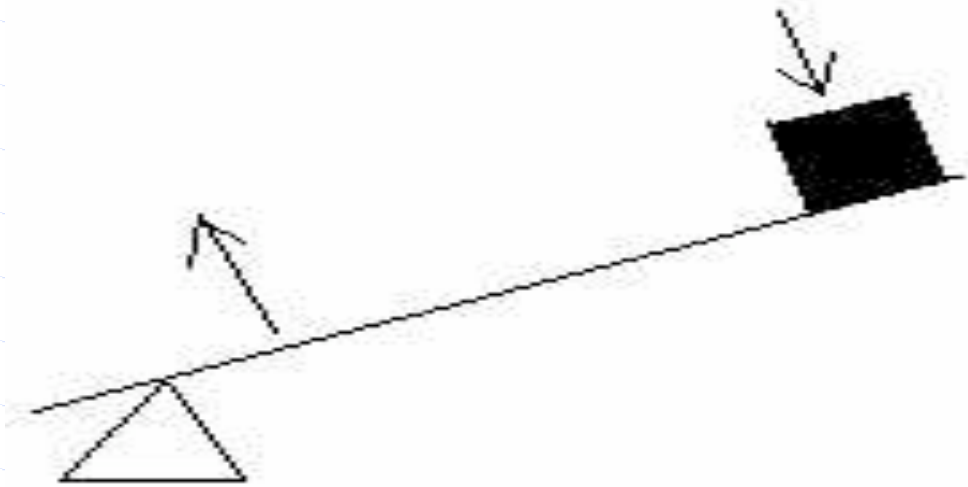


# CLASS 2



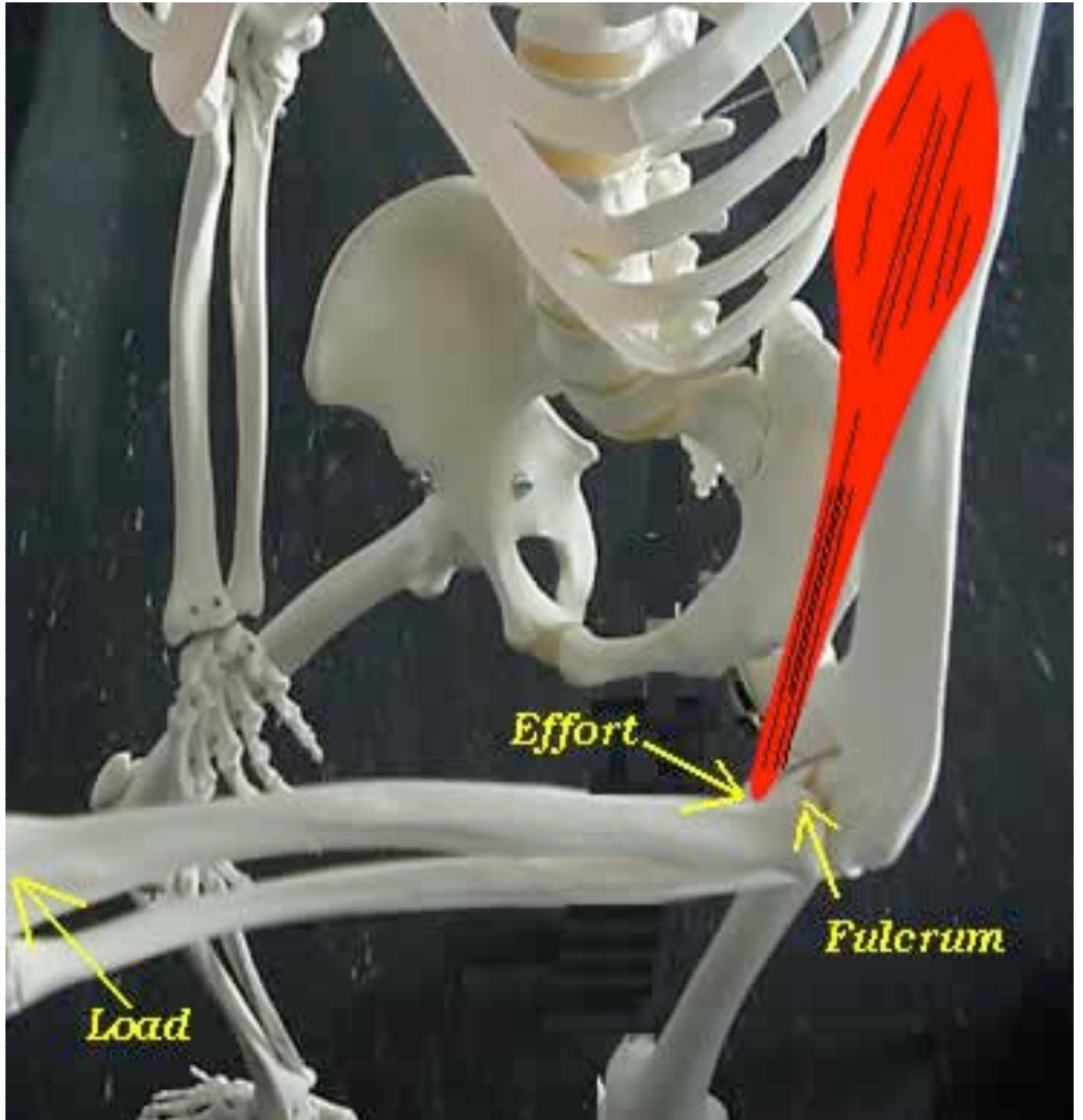
# *THIRD CLASS LEVER*

- ◆ EFFORT IS IN THE CENTER WITH THE LOAD AND FULCRUM ON OPPOSITE ENDS.

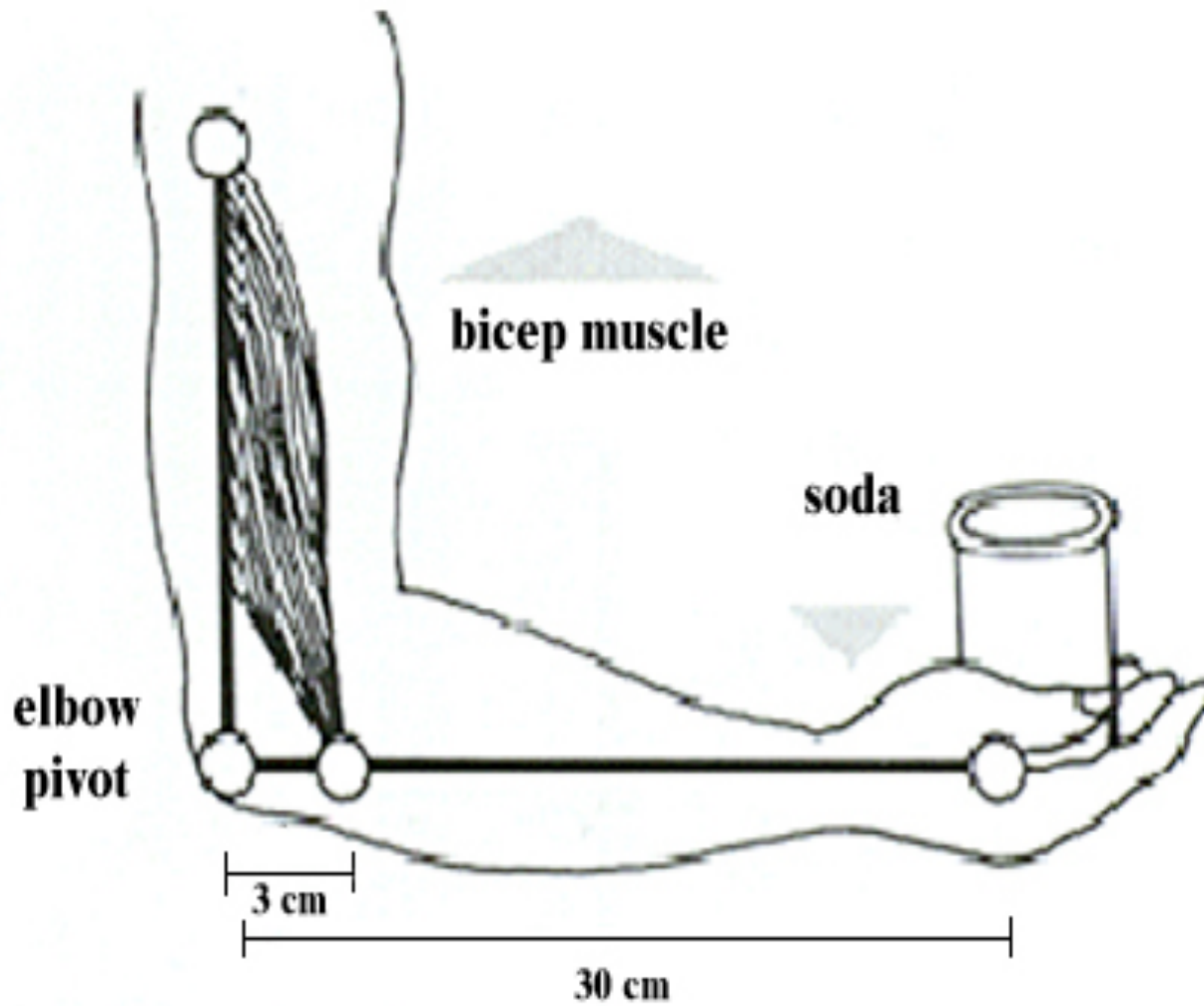


# C L A S S

3



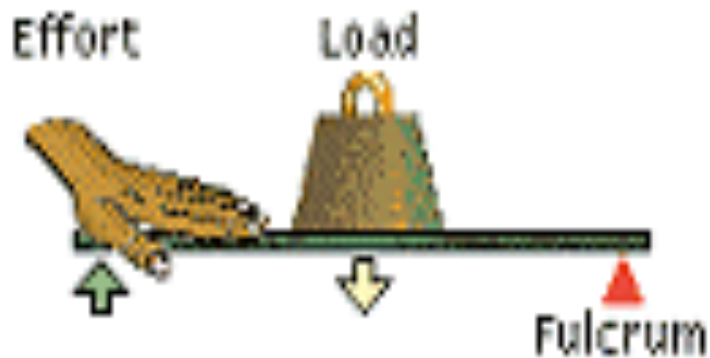
C  
L  
A  
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S  
3



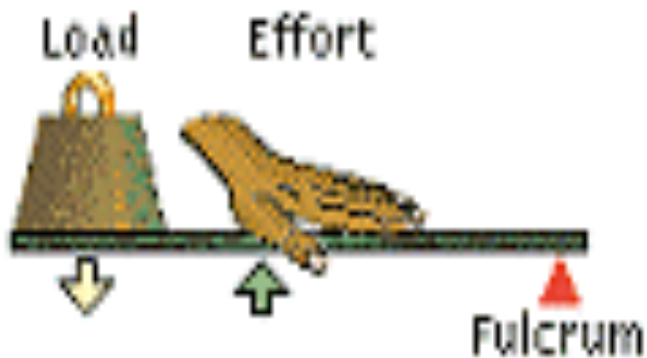
# LEVERS AS SIMPLE MACHINES



First Class  
Lever



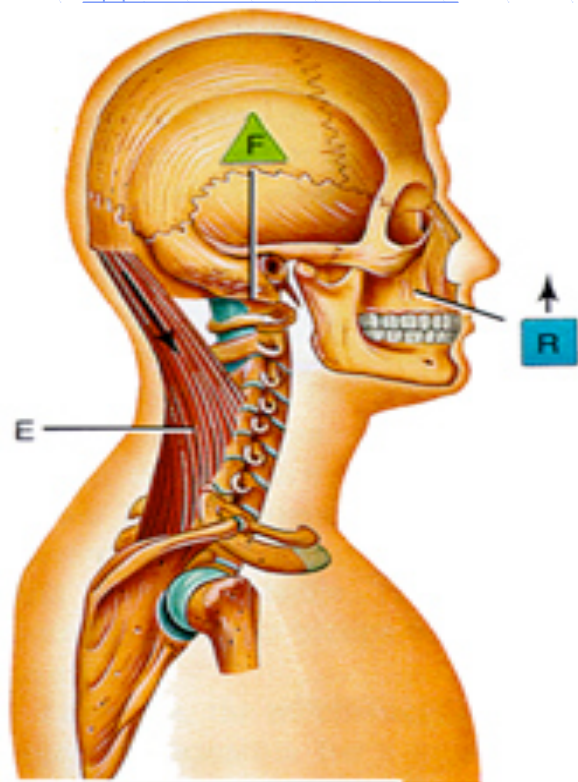
Second Class  
Lever



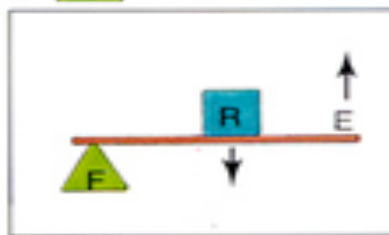
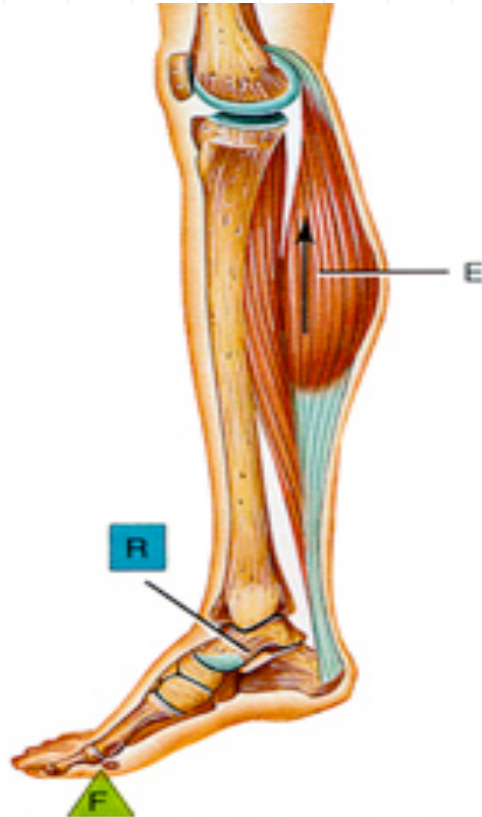
Third Class  
Lever



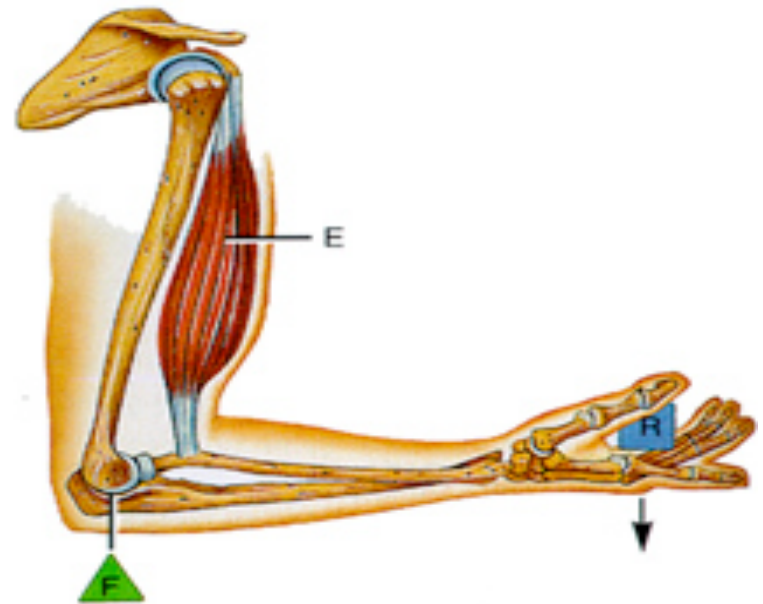
# LEVERS IN THE BODY



(a) First-class lever



(b) Second-class lever



(c) Third-class lever

# WHAT CLASS LEVER?

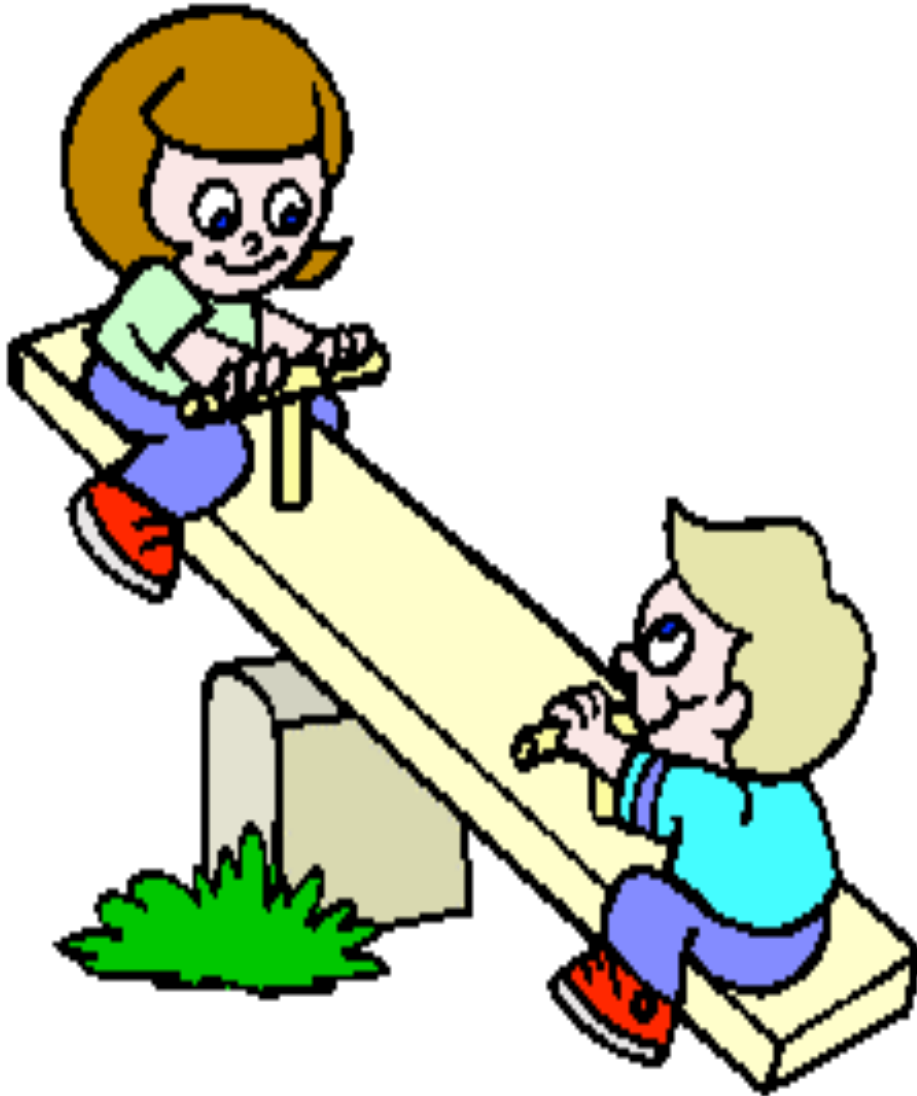


# What Class?

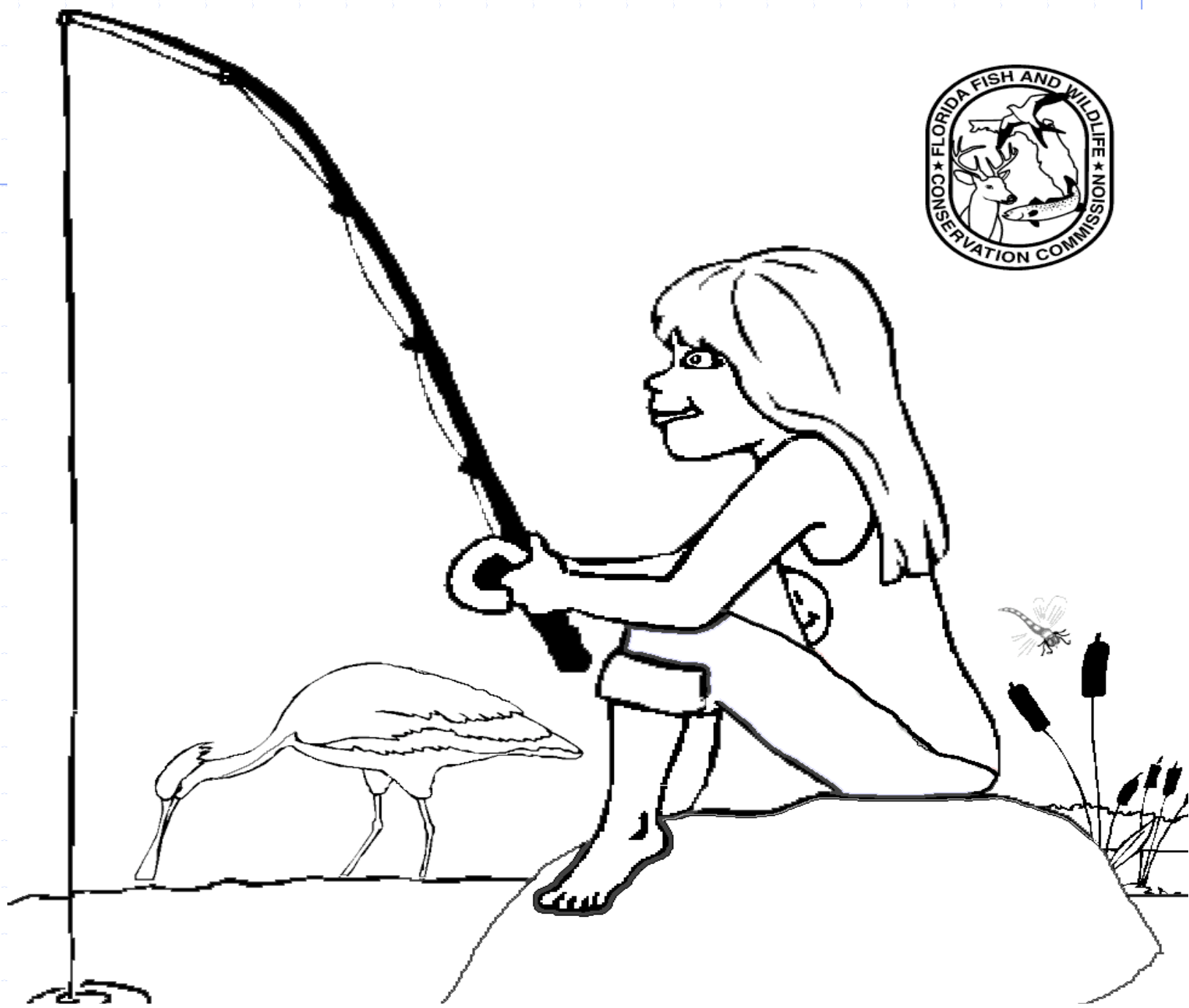




# What Class?



C  
L  
A  
S  
S  
?



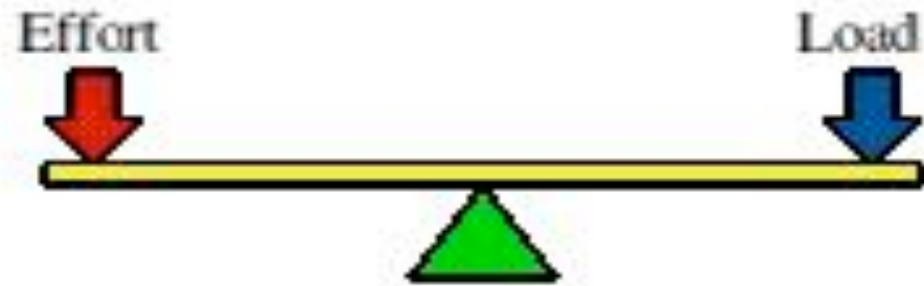
# Class ?



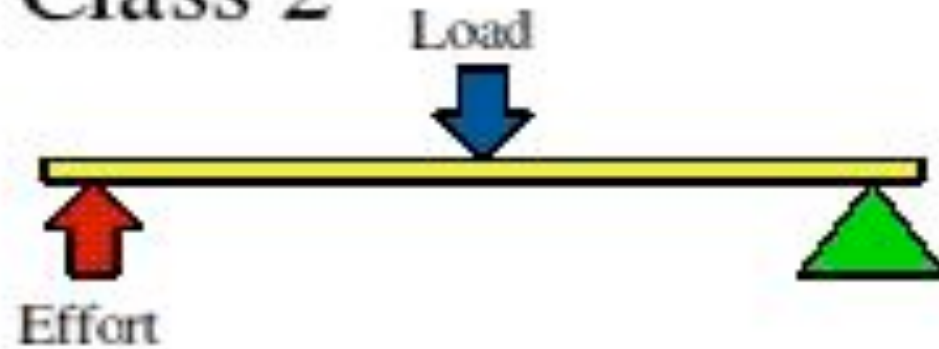
# Class ?



# Class 1



# Class 2



# Class 3

