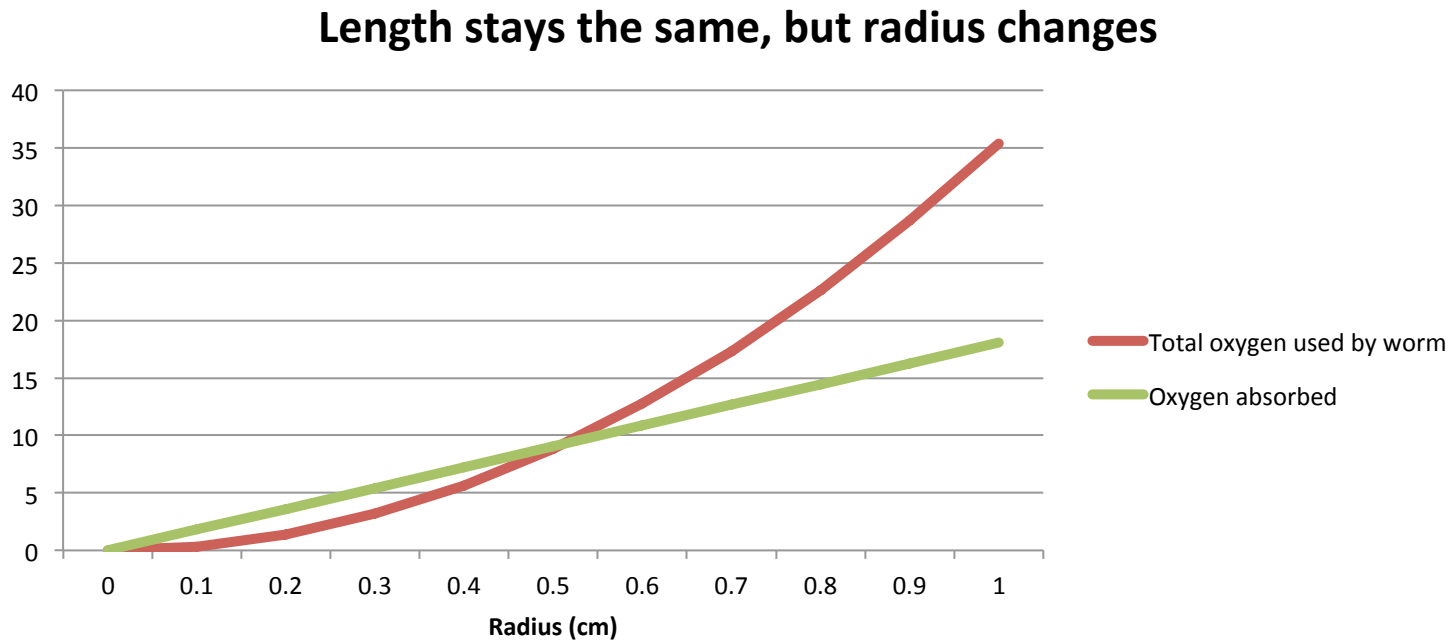
Today:
Peer-Feedback Activity for Ch 2
Normal force
Tension

Irish Phrasebook

Gobshite – loud-mouth, idiot, fool

"Stop being such a gobshite"

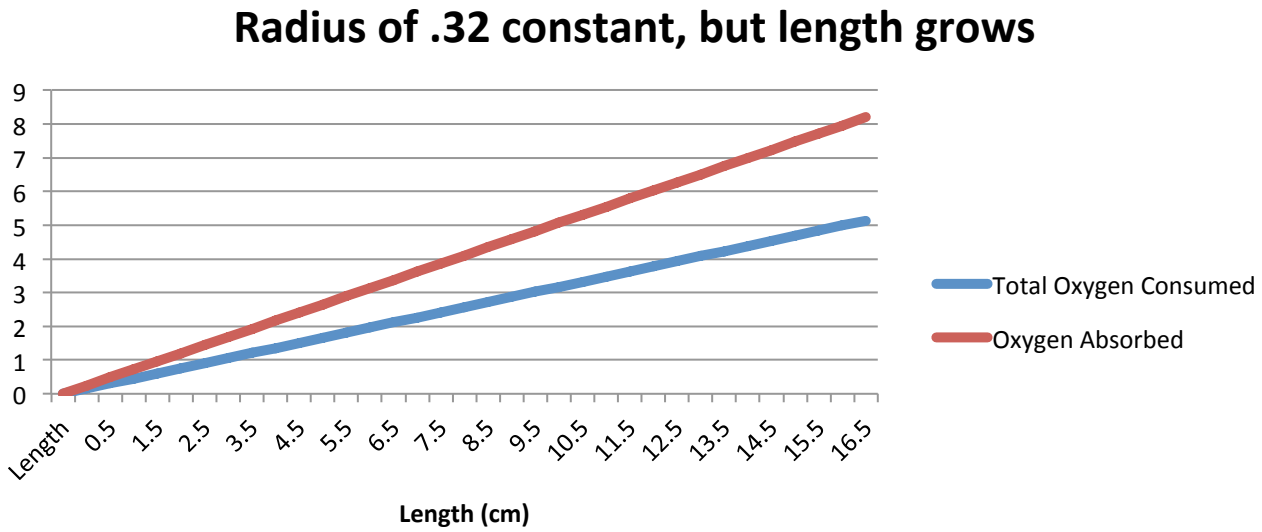
Ch 1 On-Paper HW Part D1



Explain what the crossing means and what it's implications are:

"Where they intersect is where the amount of oxygen absorbed is equal to the amount of oxygen used by the worm. When the oxygen used rises above the oxygen absorbed, the worm won't have enough oxygen in it's body to live and function. So essentially, the intersection point is the maximum radius that the worm's body can support."

Ch 1 On-Paper HW Part D2



Explain what the crossing means and what it's implications are:

"*The curves do not cross. In this case, the amount of oxygen absorbed will always be higher than the amount of oxygen used by the worm. This means the worm can get as long as it wants and still be able to support itself.*"

Ch 1 On-Paper HW Part D3

2A = Bdr

or

r = 2A/Bd

Discuss how this equation tells you about what you learned about worm growth.

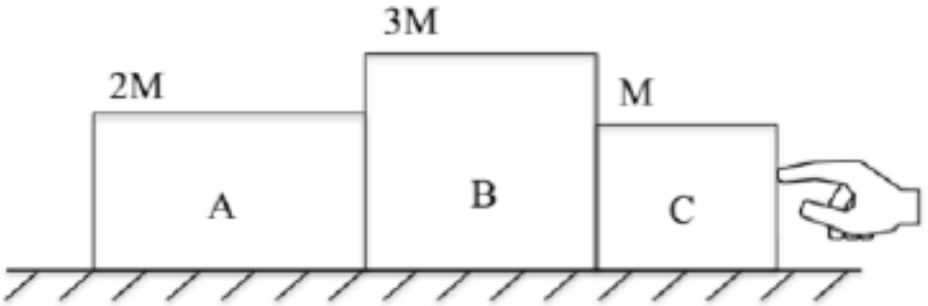
"*This equation represents where the amount of oxygen absorbed by the worm equals the amount of oxygen required to survive.*

The radius, r, is the only variable left in the equation after you set the two equations equal to one another and cancel common factors. A, B, and d are all constants. This means that radius is a limiting factor in worm growth.

The absence of length from the expression also confirms that length is not a condition for survival."

Ch 2 On-Paper Peer-Feedback

Blocks A, B, and C are being pushed across a frictionless table by a hand that exerts a constant horizontal force. Block A has mass $2M$, block B has mass $3M$, and block C has mass M.



a) Draw a systems schema that represents all the objects in this interaction.

b) Draw separate free-body diagrams for each of the three blocks. Identify the Newton's 3rd Law pairs and explain why you drew the length of each arrow the way you did.

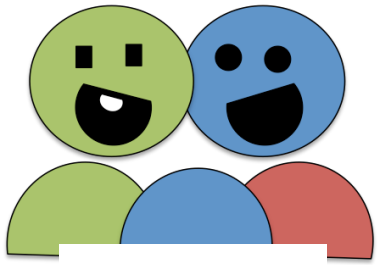
Announcements

- Ch 2 on-paper homework due Monday 28th in class
- Ch 3.1-3.4 LON-CAPA homework due Monday 28th
- Ch 3.1-3.4 on-paper homework due Friday Oct. 2nd
  - Bring attempts to **Part I** to class on Wednesday
- Exam 1 Review:
  - Alex : Wednesday at 7pm
  - Leanne: Thursday at 7pm

Reading Q's:

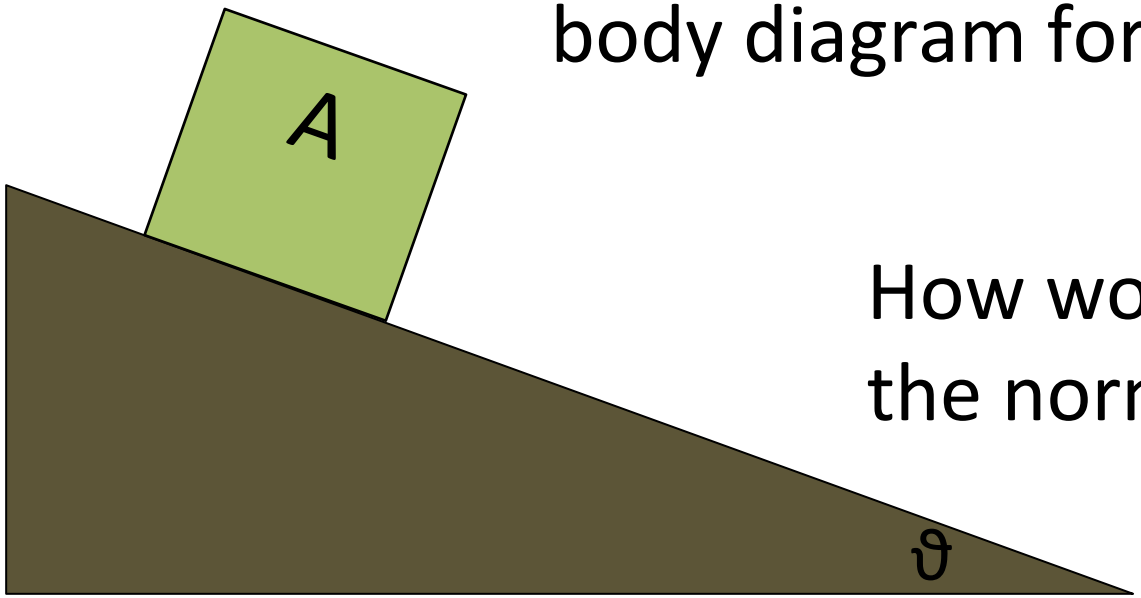
Finding frictional force, especially using the equations that include sin, cos, theta, etc.

I would like to know how to add vectors going in different directions. (Ex. gravity downhill and gravity pointing straight down from the plane)



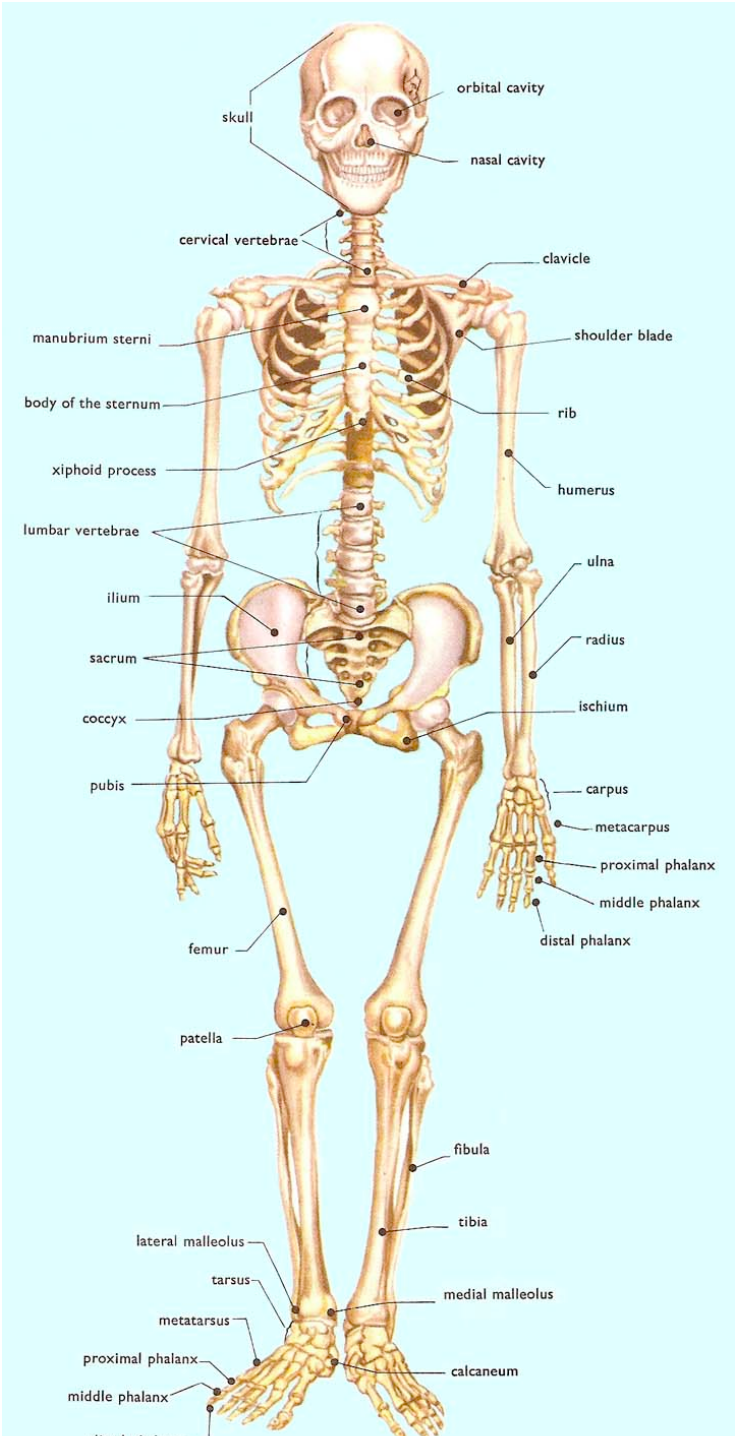
Discuss It!

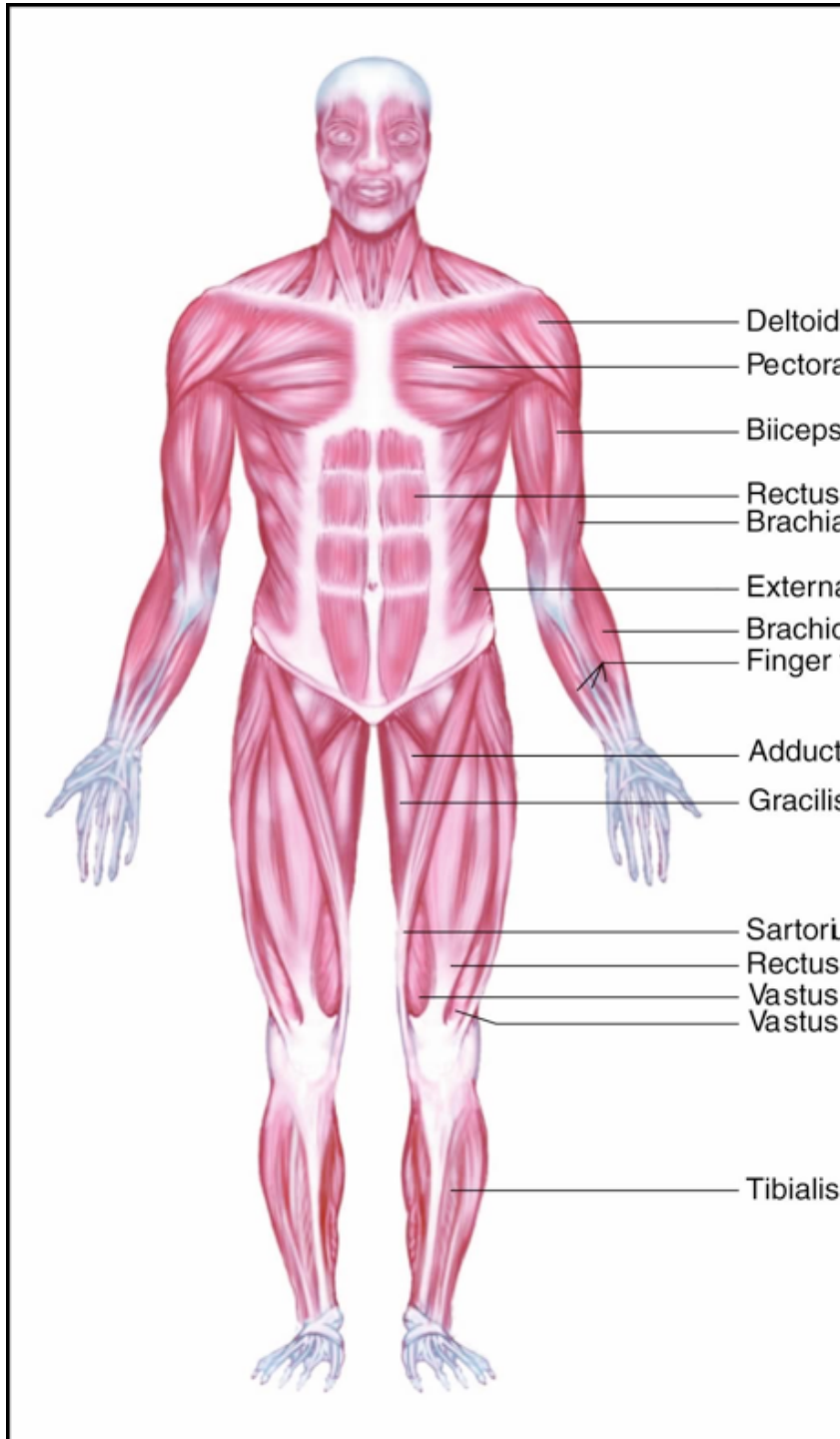
Box A is sitting still on the ramp. Draw a free body diagram for box A.

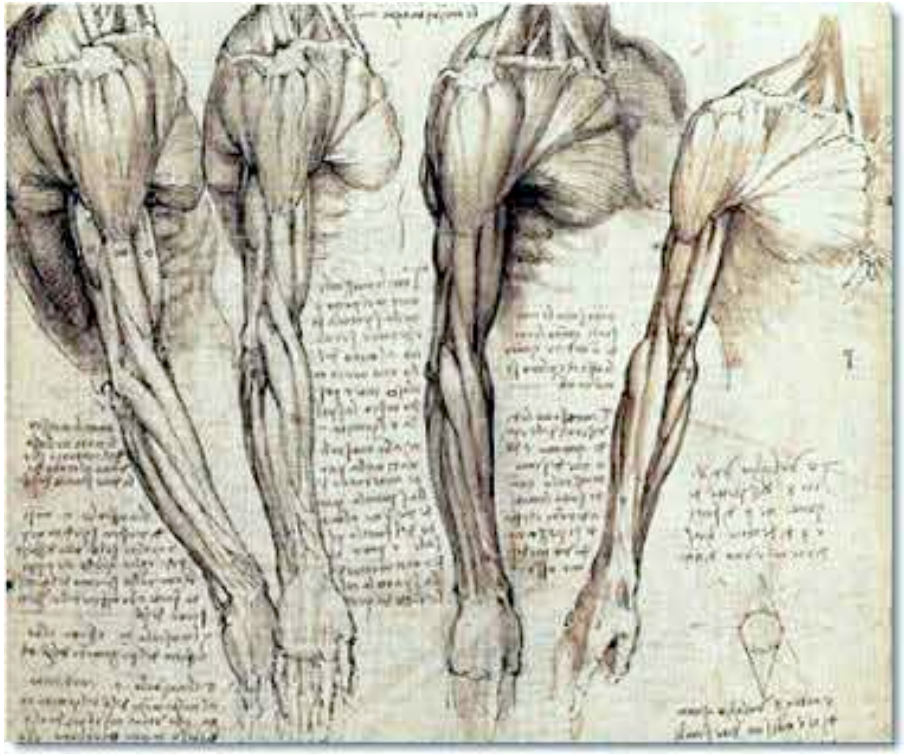


How would you quantify the normal force?

Why are the normal force and the weight of an object not third law pairs?


skull
orbital cavity
nasal cavity
cervical vertebrae
clavicle
manubrium sterni
shoulder blade
body of the sternum
rib
xiphoid process
humerus
lumbar vertebrae
ulna
ilium
radius
sacrum
ischium
coccyx
carpus
pubis
metacarpus
proximal phalanx
middle phalanx
distal phalanx
femur
patella
fibula
tibia
lateral malleolus
tarsus
medial malleolus
metatarsus
proximal phalanx
calcaneum
middle phalanx


Deltoid
Pectora
Biiceps
Rectus
Brachia
Externa
Brachio
Finger
Adduct
Gracilis
Sartori
Rectus
Vastus
Vastus
Tibialis



Imagine a person holding a barbell in their hand, with the hand by their side. Nothing is moving. Draw the free-body diagrams for (1) the barbell, (2) the person's arm, and (3) their shoulder. Take into account the weight of the arm in your diagrams.