



Dr. Pandya
Biology
Room 330

Please be seated

The bell work is on the board, Please
fill out the 3-5 card now.

Agenda

- Please record the class information.
- Put all Homework, Tests, Projects, etc. in your Agenda!.

Syllabus

- Take 5 minutes to read over carefully.
- Must be returned and signed by Friday.
 - Work to be turned in must be placed in the designated basket **before** the bell rings for class to start.





Safety Contract

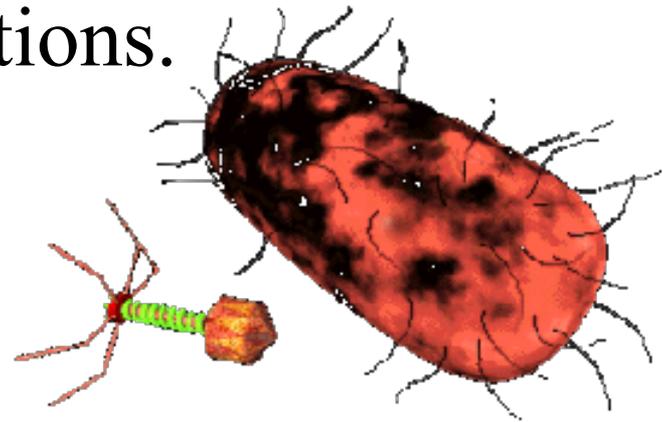
- Please read over the safety contract carefully.
- Both you and your parents need to sign both copies. You will retain one copy, and I will retain the other.
- You cannot perform a lab without turning in a signed safety contract.

What is Biology About?

Chapter 1

Biology: The study of Life

- How living things interact
- Helps us solve problems
- Helps us appreciate diversity of living things and their interactions.



Characteristics of living things

Section 1-2

- Organization
- Metabolism
- Homeostasis
- Reproduction
 - Two types
 - Species
- Growth
- Stimulus response system
- Cells



Brainstorm Activity

- Firevs. Golfish.



- Proof of life.

Themes in Biology

- Cellular structure and function
- Reproduction
- Metabolism
- Homeostasis
- Heredity
- Evolution
- Interdependence
- Matter/Energy/Organization



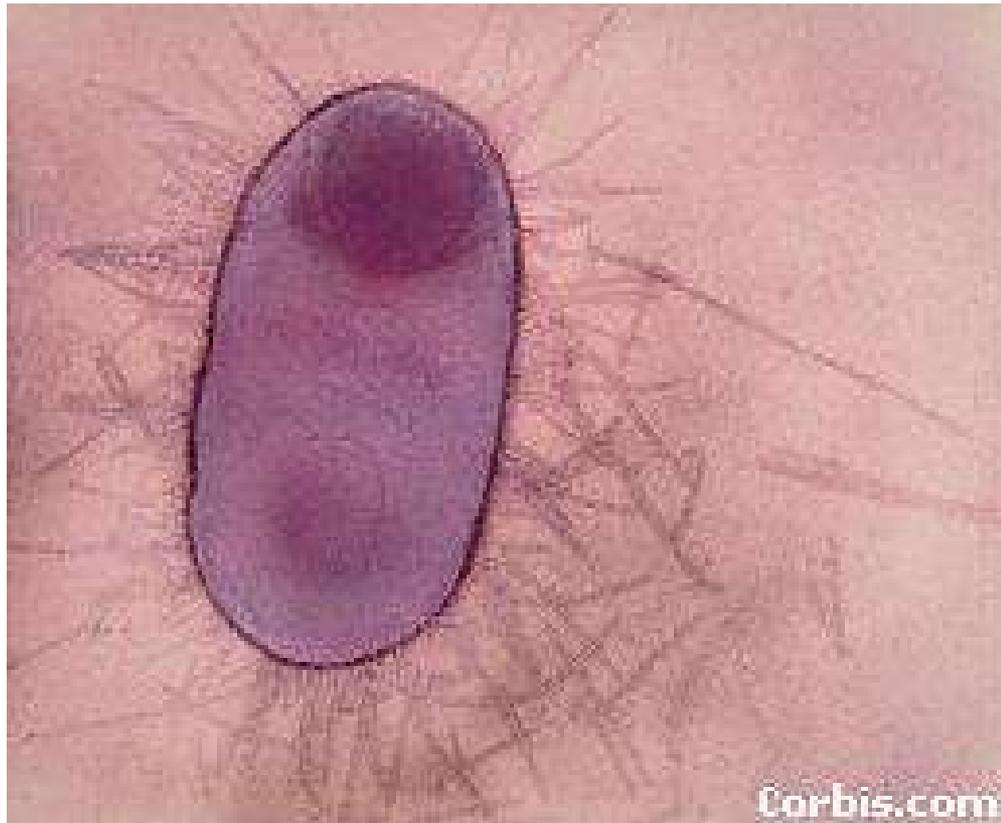
What Theme Is This?





berthoule





What do these different branches of science study?

- Ecology Mycology
- Zoology Herpetology
- Entomology Microbiology
- Cytology Biochemistry
- Epidemiology Physiology
- Botany Taxonomy
- Ichthyology Ornithology

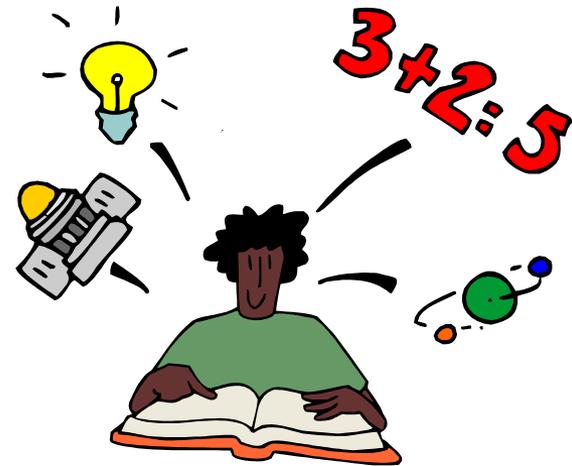
Metric Measurements

- Length=meter
- Mass=gram
- Time=seconds
- Temperature= degree Celsius
- Volume=liter
- Kilo- K- 1000
- Hecto-H- 100
- Dekka- Da- 10
- M/L/G - 1
- Deci- D- .1
- Centi- C- .01
- Mili- M- .001

Convert the following:

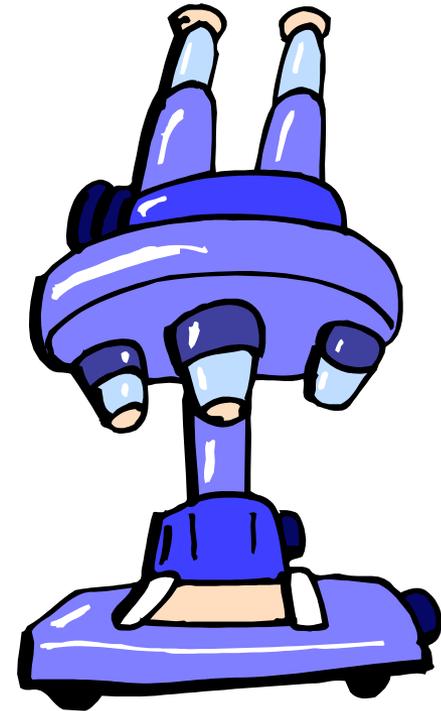
- .5 grams to dekagrams
- 10,000 meters to kilometers
- .1 deciliter to milliliter
- Answers

- .05 dag = .5 g
- 10 km = 10,000m
- 10 ml = .1dl



Parts of a compound/light microscope

- Eyepiece (ocular)
- Body Tube
- Course and Fine Adjustment
- Arm
- Base
- Nose Piece
- Objective
- Stage and Stage Clips
- Diaphragm
- Light Source



How do you prepare a microscope slide?



- 1) Carry the microscope to your station, with one hand supporting the arm and the other the base
- 2) Clean glass slide and cover slip as well as the lenses with lens paper
- 3) Place specimen in the middle of the slide
- 4) Lower the cover slip and remove excess liquid
- 5) Add stain if called for

Types of Microscopes

- Compound Light Microscope
- Dissecting Microscope
- Electron Microscope (SEM/TEM)

Homework: Due Tomorrow

- Convert 32 g to hectograms
- Convert .5kg to milligrams
- Convert 5cm to millimeters
- Convert 5 cm to Decameters
- Convert 8.3 Liters to Deciliters
- Convert 97 ml to Deciliters
- 75.8 mg to cg*8000km to cm
- 8000 cm to km* 1g to cg

