























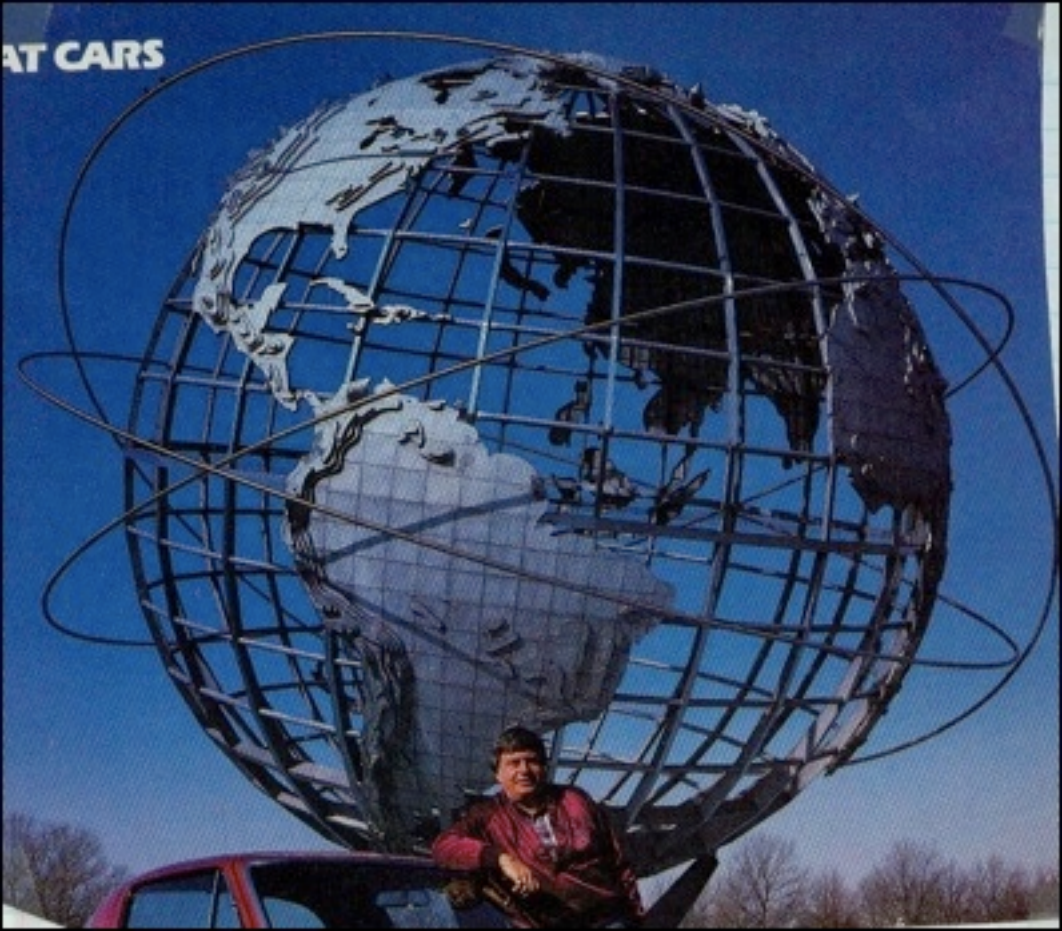




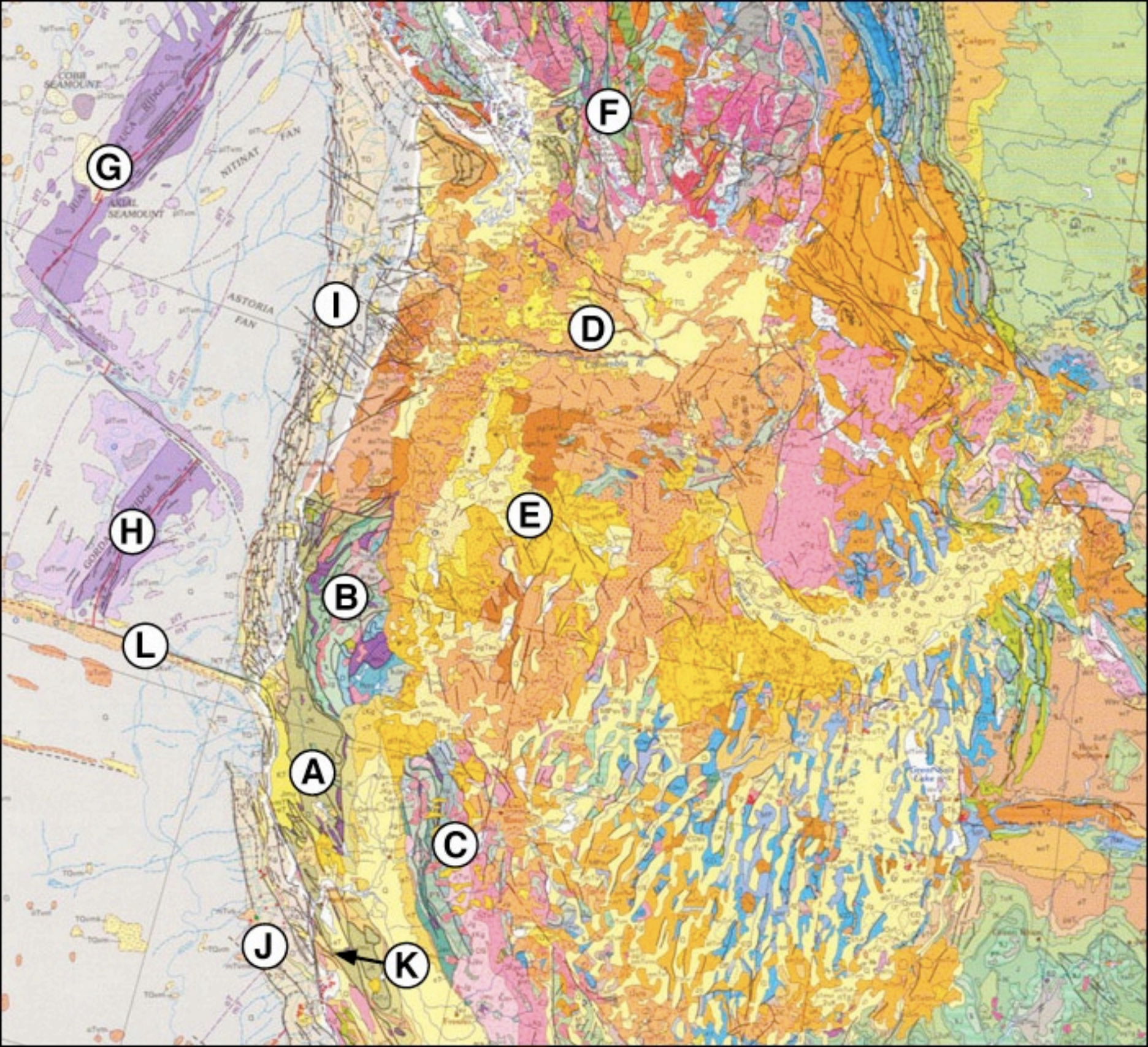




AT CARS









Unexpectedly powerful: the IXQ with Lithium-Ion technology.



**BOSCH**  
Invented for life









## BIOMECHANICS AFRICAN BEE

A mechanical bee, constructed with 3D renders from the great artist [saxdK](#), carefully blended and postworked to achieve a photorealistic look.

Size: 2560x1600 pixels

4 color variations included

Reference PSD included



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Art by Mauricio Estrella  
[manicho.deviantart.com](http://manicho.deviantart.com)



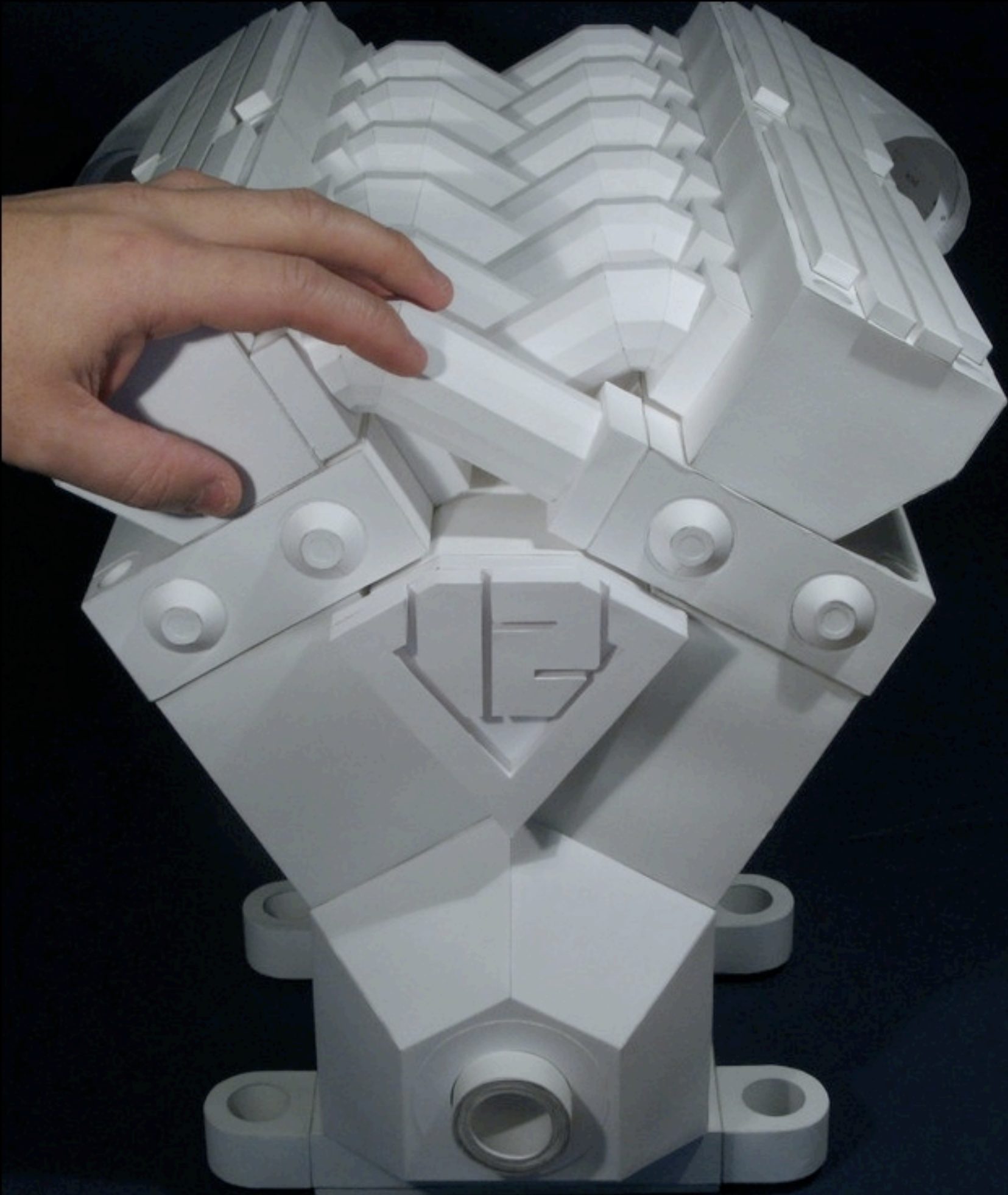
Mobile



4:3 screens



Widescreens





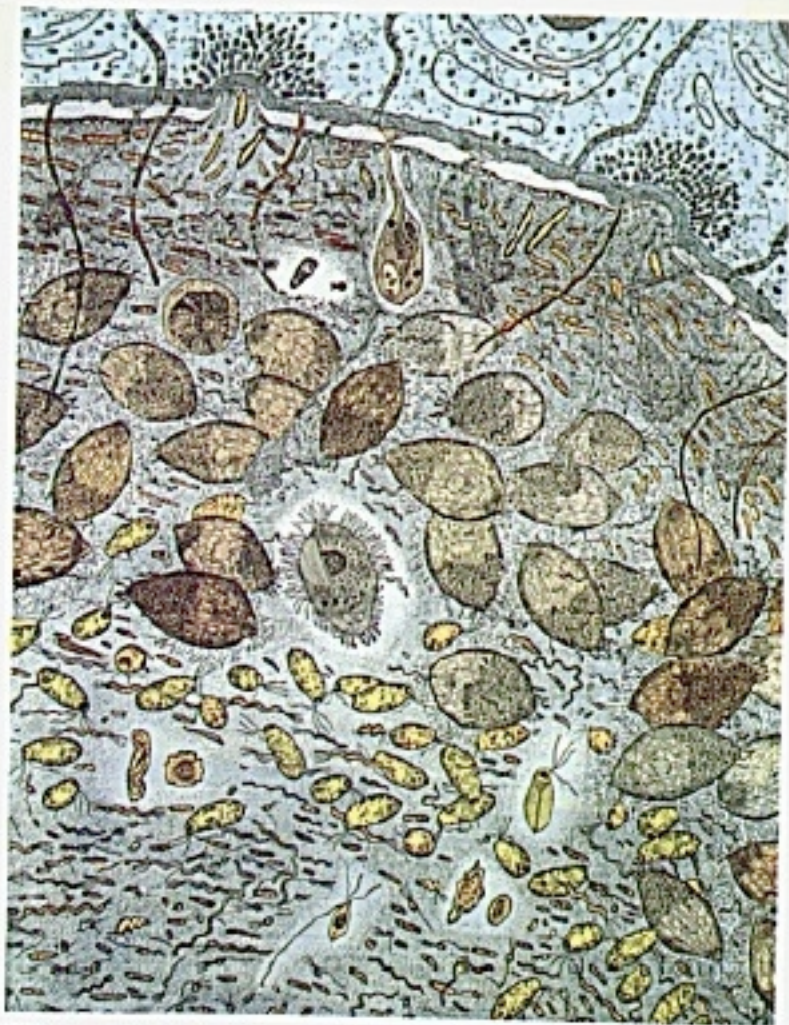
Ichthyosaur (*Ophthalmosaurus*)





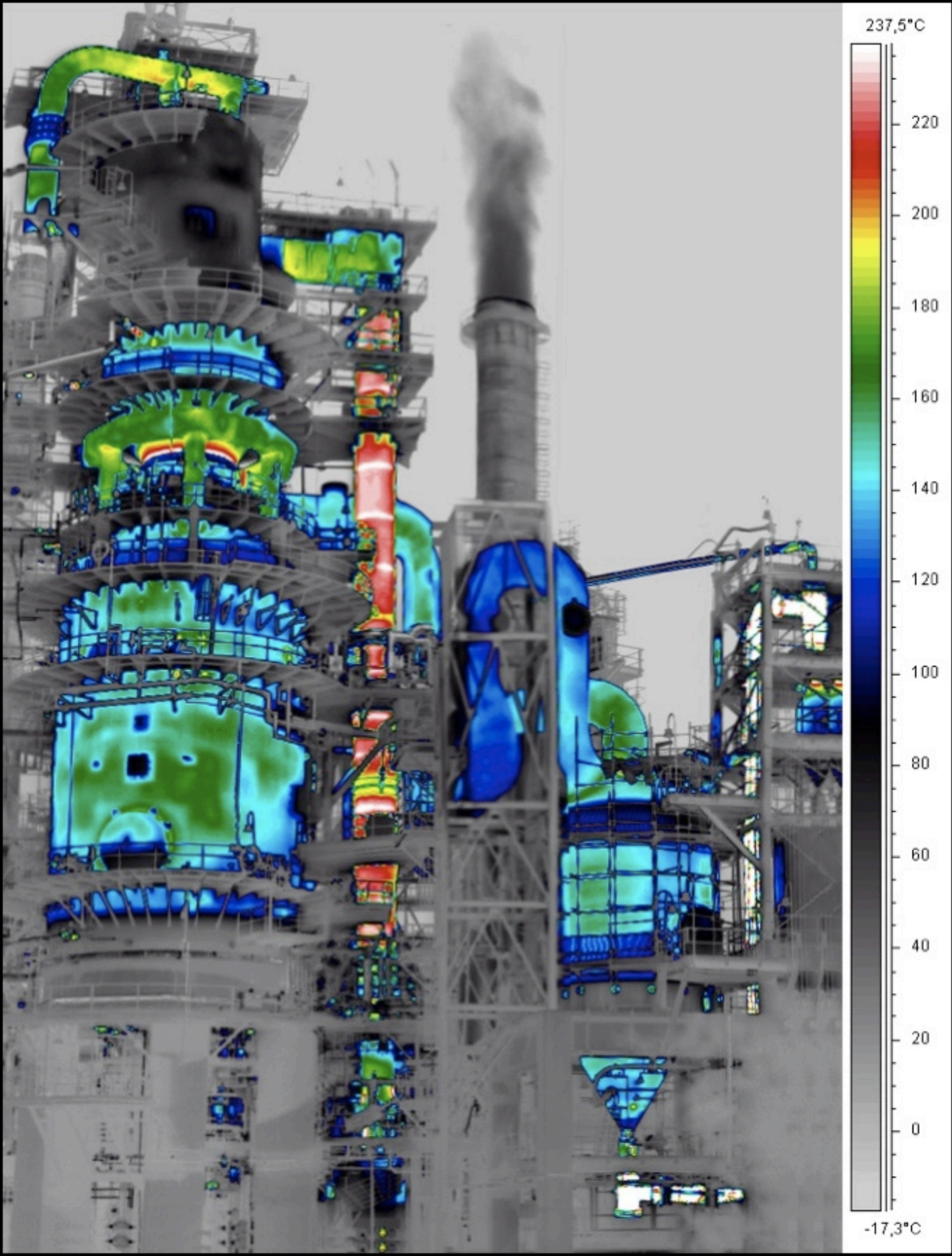
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S-58 Nautilus Half Shell



The symbiotic community of microorganisms in desert termite's hindgut is what enables it to digest wood.









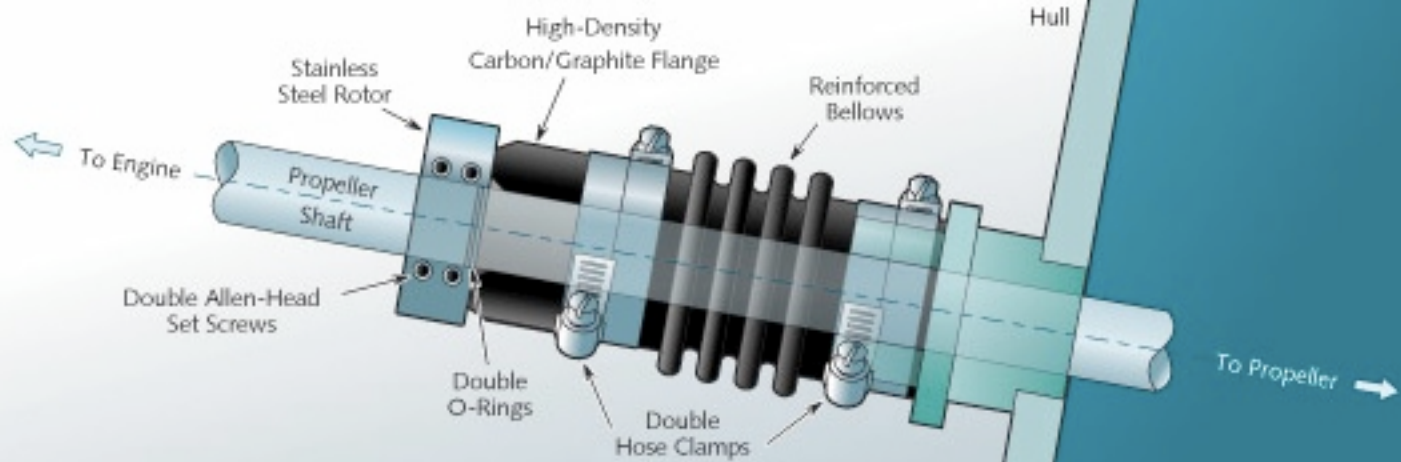




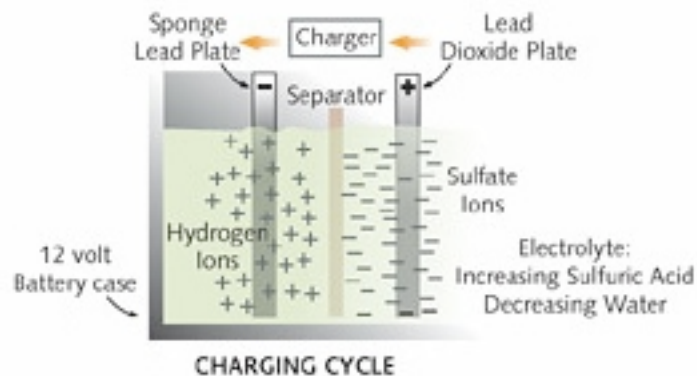
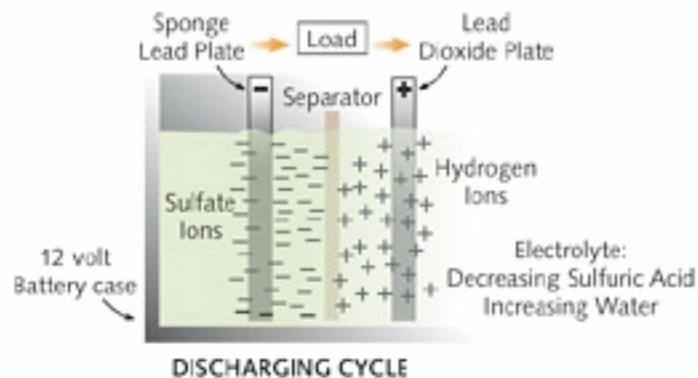
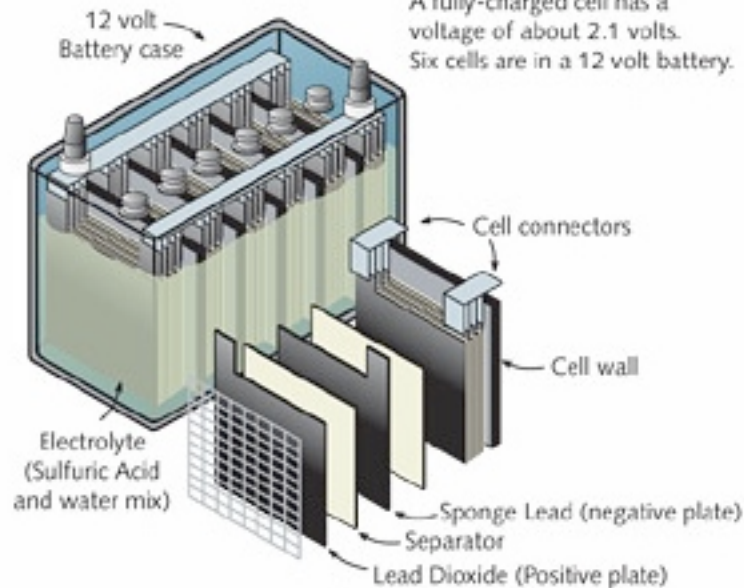
THE STROKES



# Propeller Shaft Seal



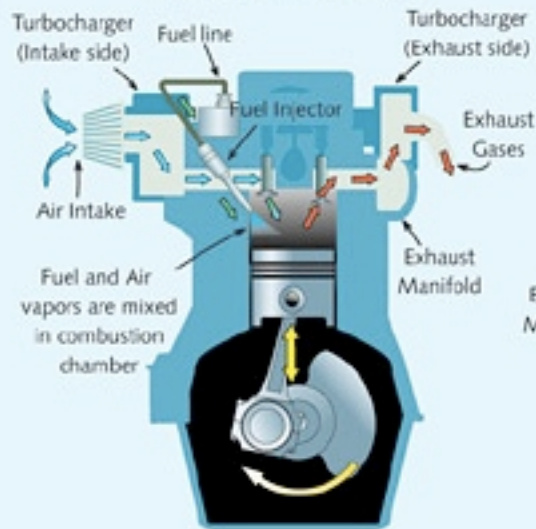
## Battery Cycles





## Internal Combustion Engines

Fuel-Injected Diesel Engine



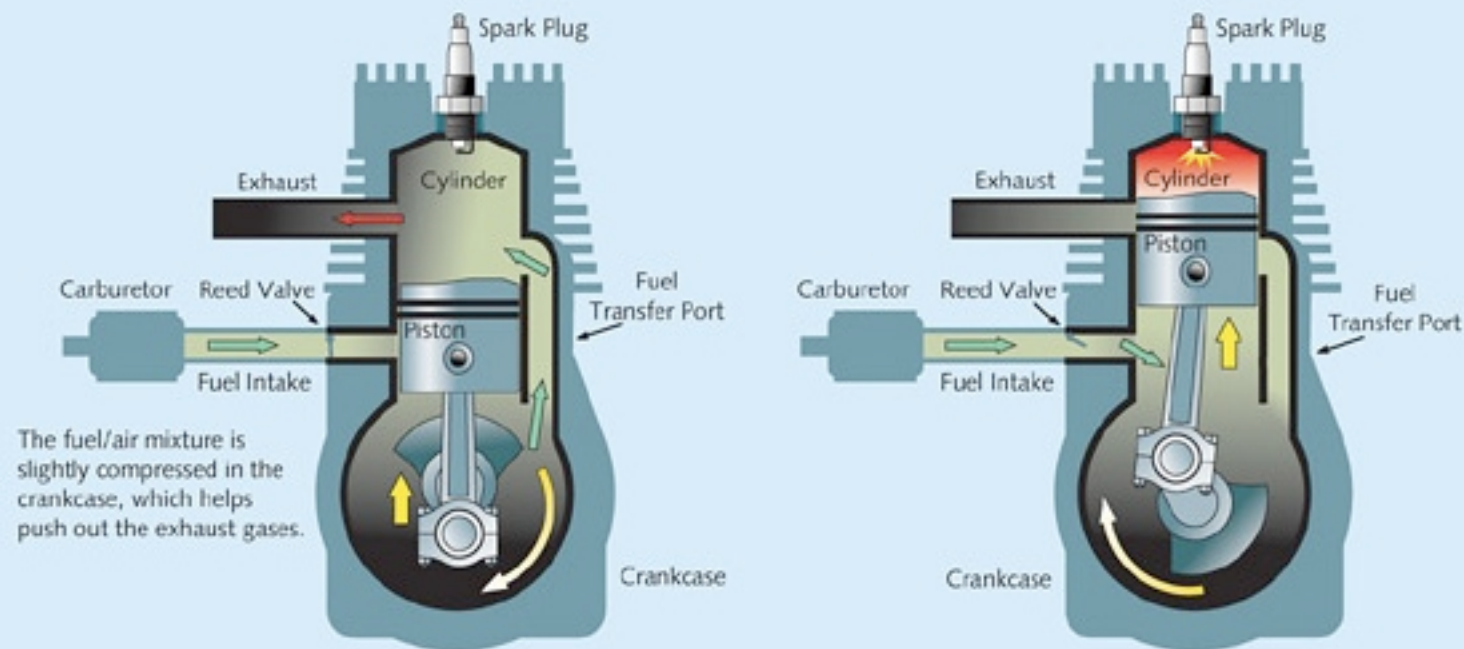
Carbureted Gasoline Engine



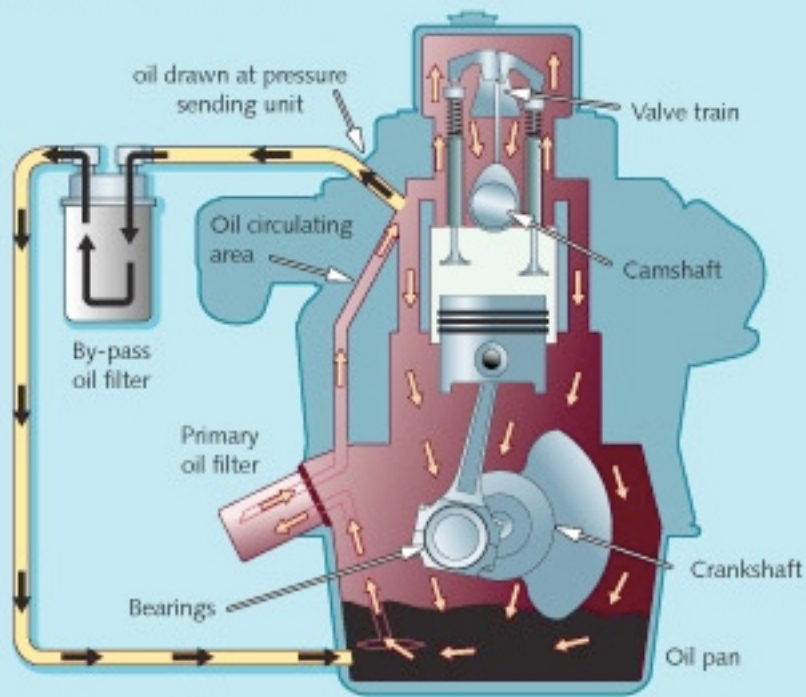
Fuel-Injected Gasoline Engine



## 2-Cycle Combustion Engine



## Oil Lubrication By-Pass System



MEMORY GATE  
POLY 2

SOURCE

POLY 1  
ACCESS GATE

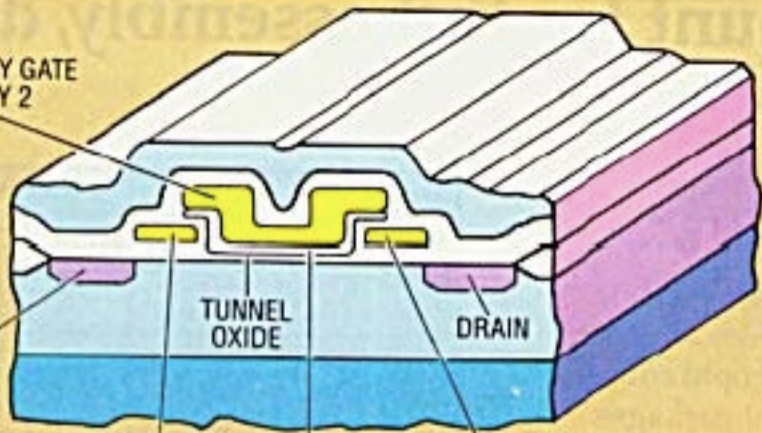
TUNNEL  
OXIDE

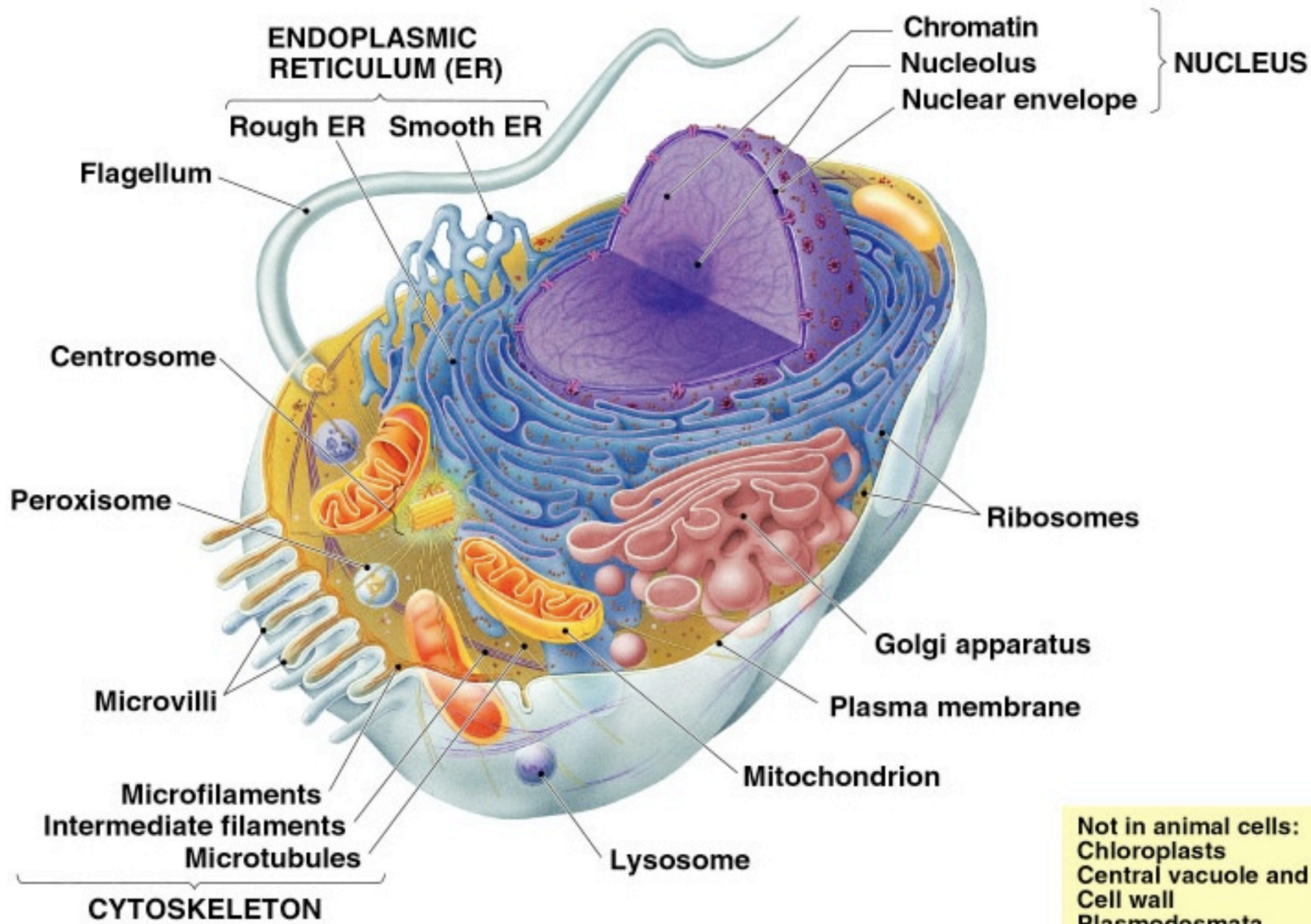
MEMORY  
NITRIDE

POLY 1  
ACCESS GATE

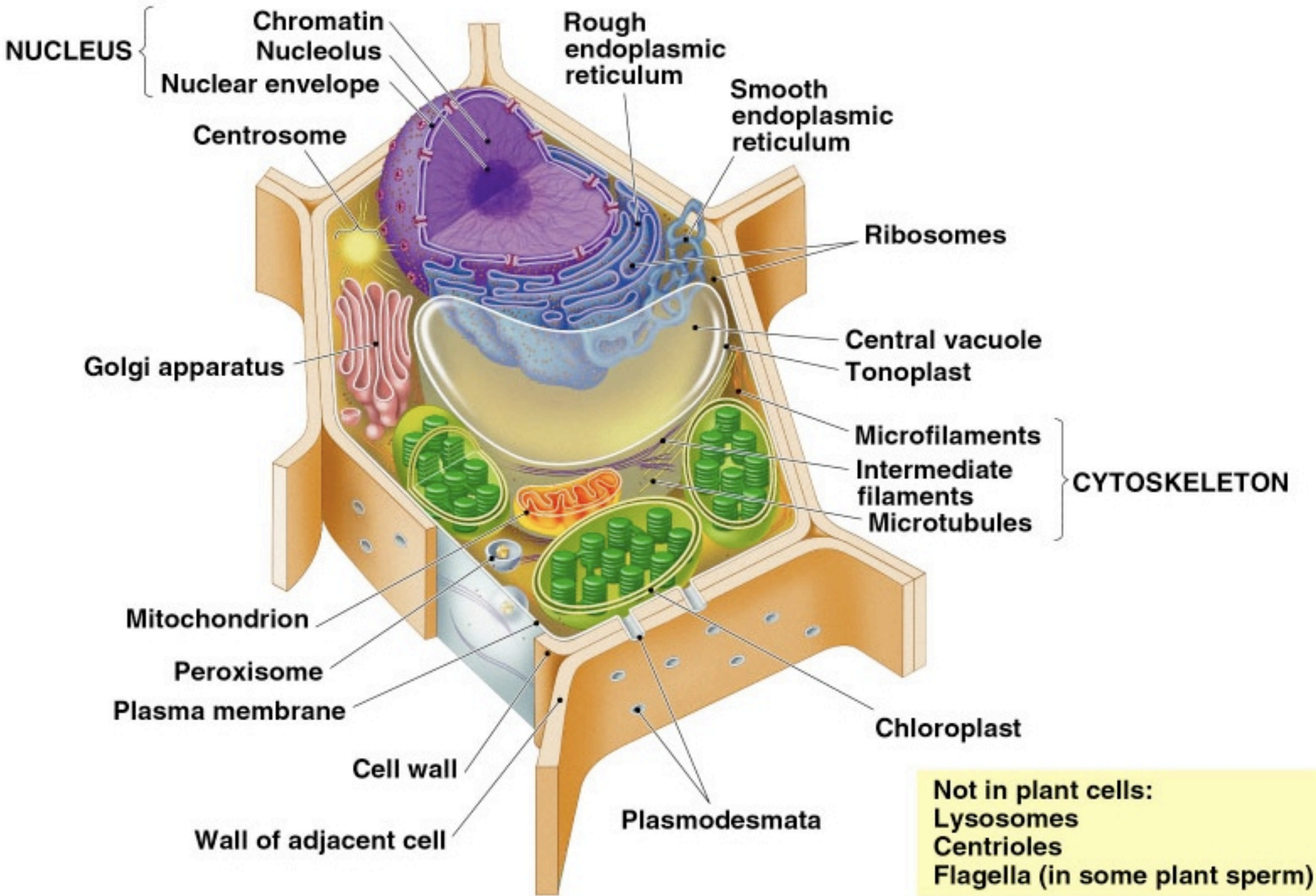
DRAIN

The nitride between the memory gate and the tunnel oxide exhibits enough hysteresis to store information.





Not in animal cells:  
 Chloroplasts  
 Central vacuole and tonoplast  
 Cell wall  
 Plasmodesmata



**NUCLEUS**

Chromatin  
Nucleolus  
Nuclear envelope

Rough  
endoplasmic  
reticulum

Smooth  
endoplasmic  
reticulum

Centrosome

Ribosomes

Golgi apparatus

Central vacuole  
Tonoplast

Microfilaments  
Intermediate  
filaments  
Microtubules

**CYTOSKELETON**

Mitochondrion

Peroxisome

Plasma membrane

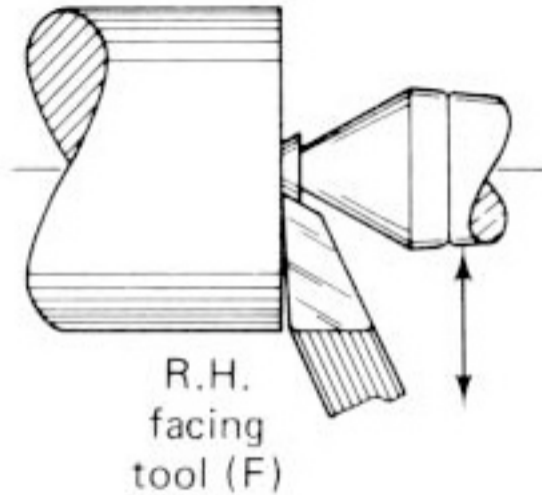
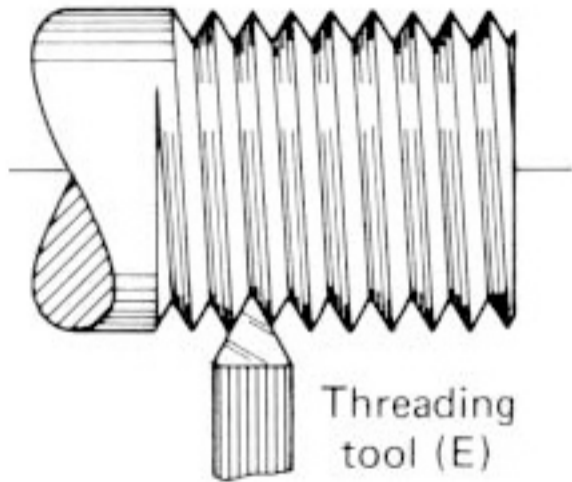
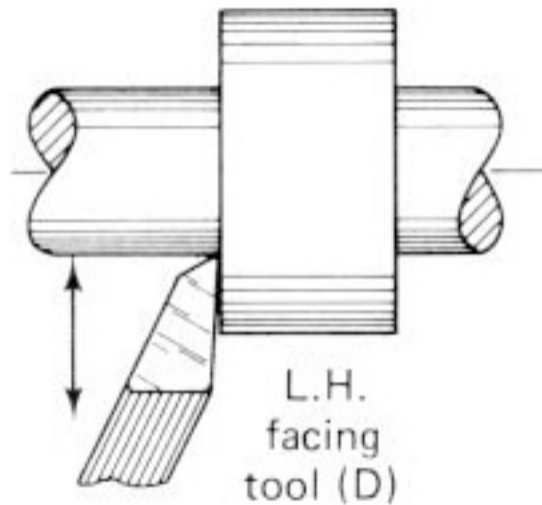
Cell wall

Chloroplast

Wall of adjacent cell

Plasmodesmata

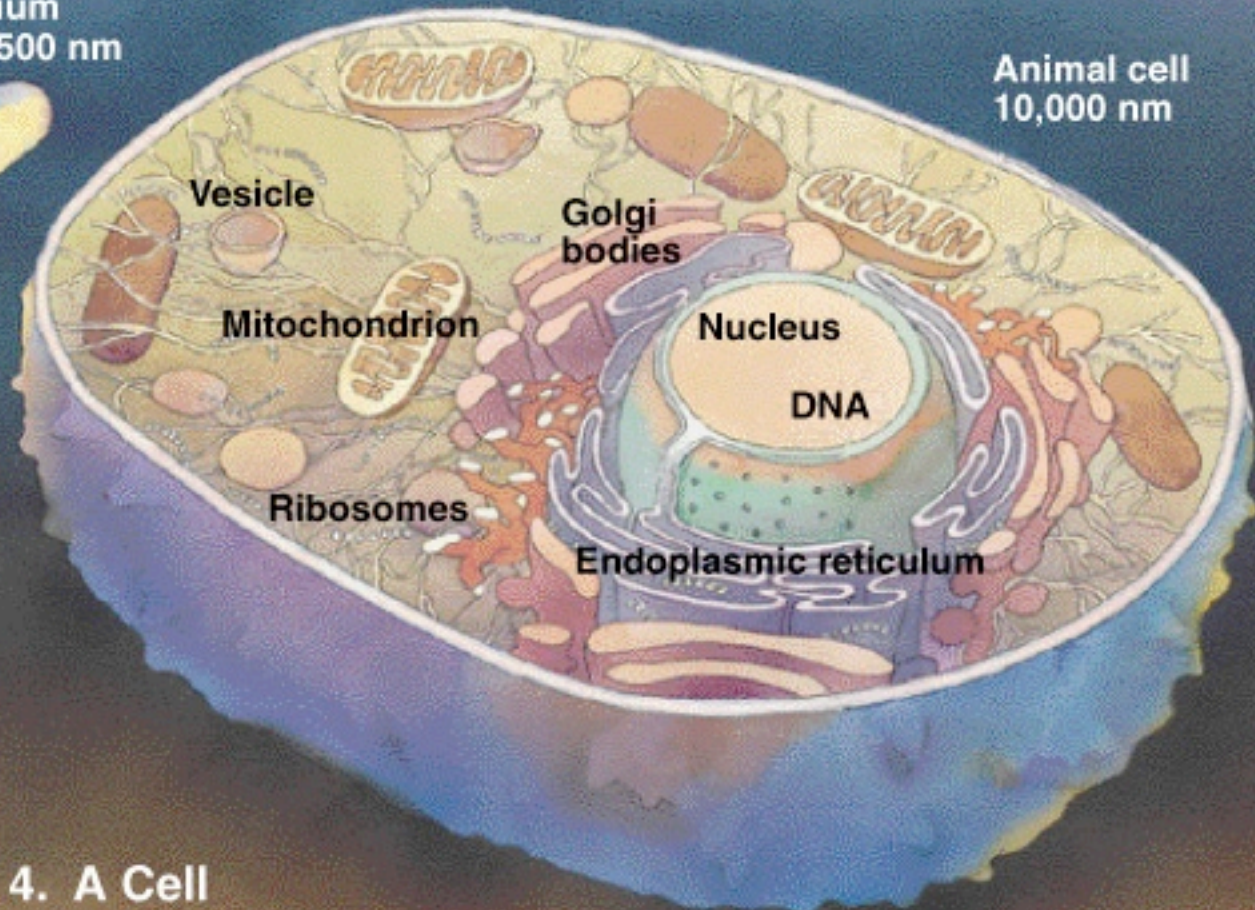
**Not in plant cells:**  
Lysosomes  
Centrioles  
Flagella (in some plant sperm)



**Bacterium**  
1000-1500 nm



**Animal cell**  
10,000 nm



**Vesicle**

**Golgi bodies**

**Mitochondrion**

**Nucleus**

**DNA**

**Ribosomes**

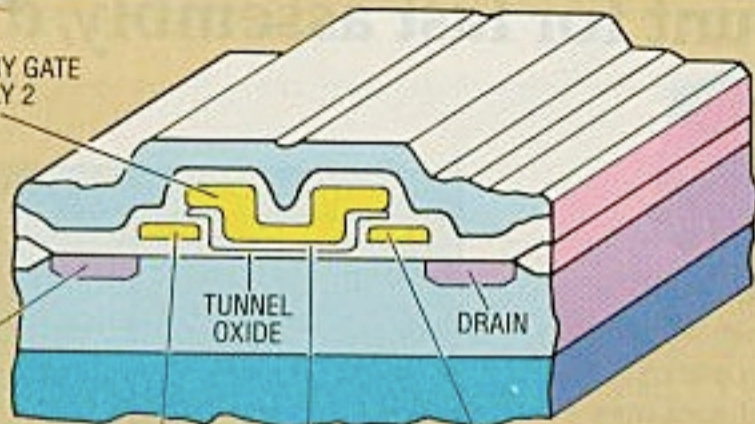
**Endoplasmic reticulum**

**Scale 4. A Cell**  
Magnified 10 thousand times



MEMORY GATE  
POLY 2

SOURCE



TUNNEL  
OXIDE

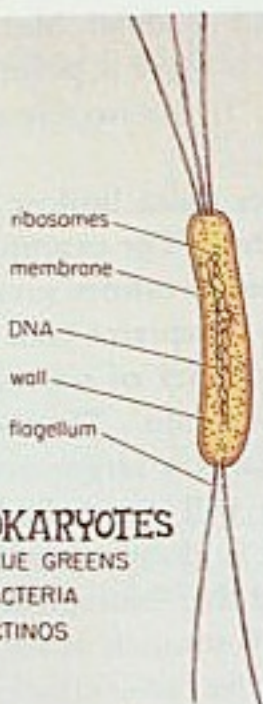
DRAIN

POLY 1  
ACCESS GATE

MEMORY  
NITRIDE

POLY 1  
ACCESS GATE

The nitride between the memory gate and the tunnel oxide exhibits enough hysteresis to store information.



ribosomes

membrane

DNA

wall

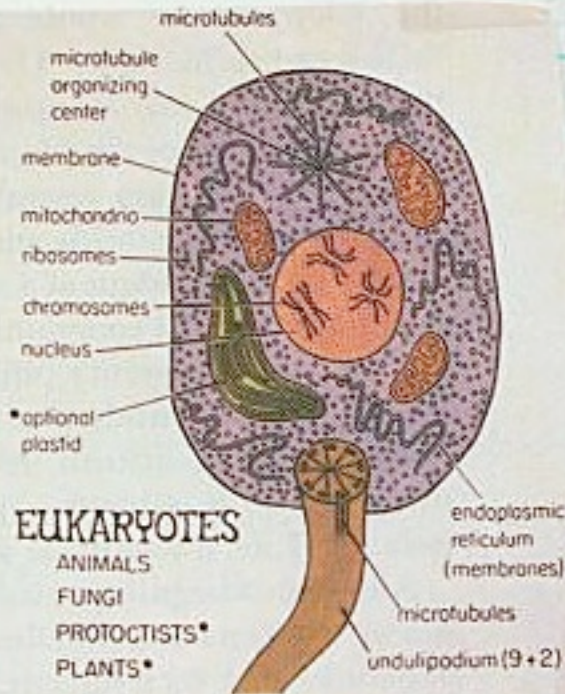
flagellum

## PROKARYOTES

BLUE GREENS

BACTERIA

ACTINOS



microtubules

microtubule  
organizing  
center

membrane

mitochondrio

ribosomes

chromosomes

nucleus

• optional  
plastid

endoplasmic  
reticulum  
(membranes)

microtubules

undulipodium (9+2)

## EUKARYOTES

ANIMALS

FUNGI

PROTOCTISTS\*

PLANTS\*

Symbiotic theory of cell evolution holds that plastids, other eukaryote organelles used to be prokaryotes.

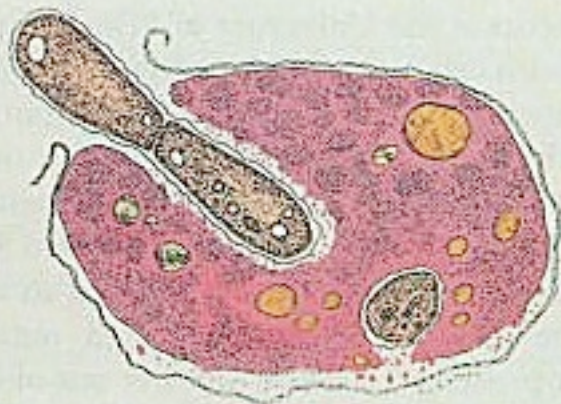
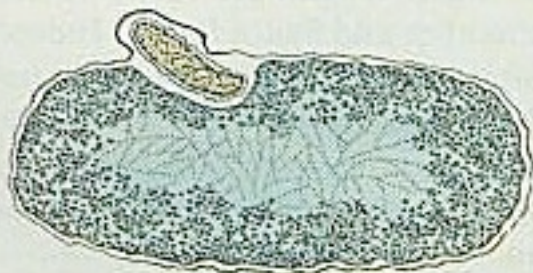
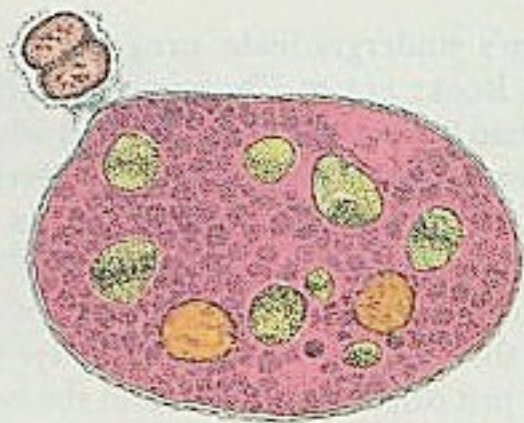
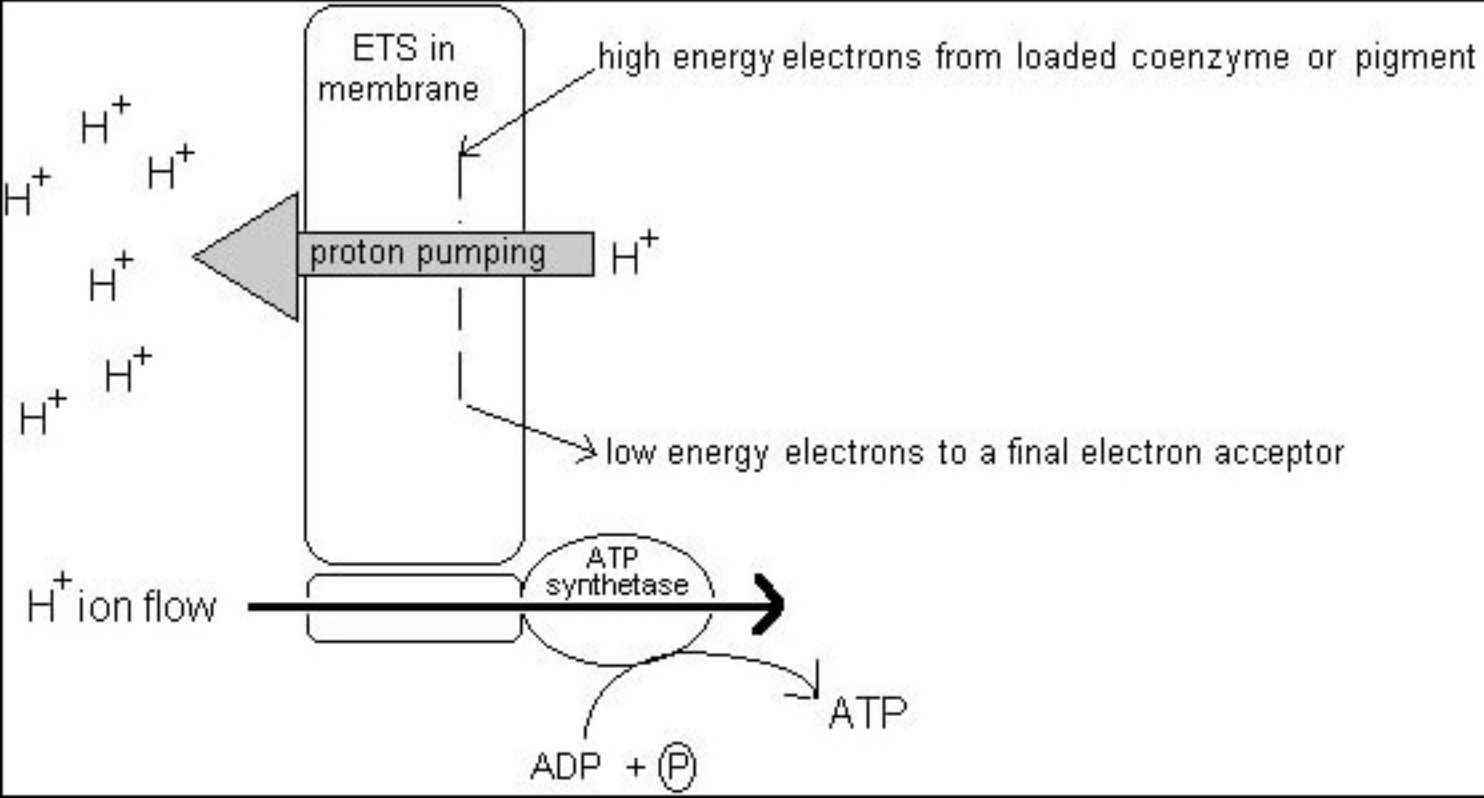


Plate from *The Microcosmos Coloring Book* shows three ways in which small bacteria prey on larger cells.

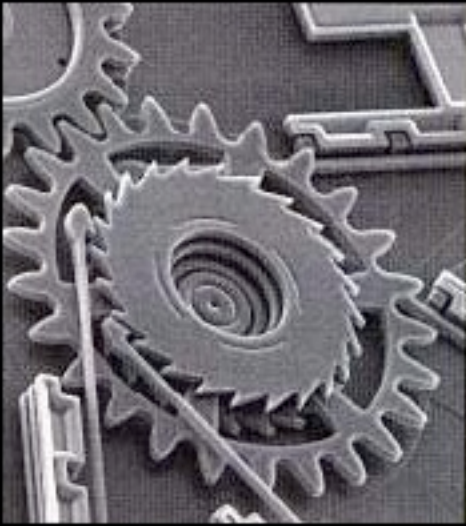


# Napoleon's Russian Campaign of 1812

Strength of army = approximate thickness of track  
Return march shown in black

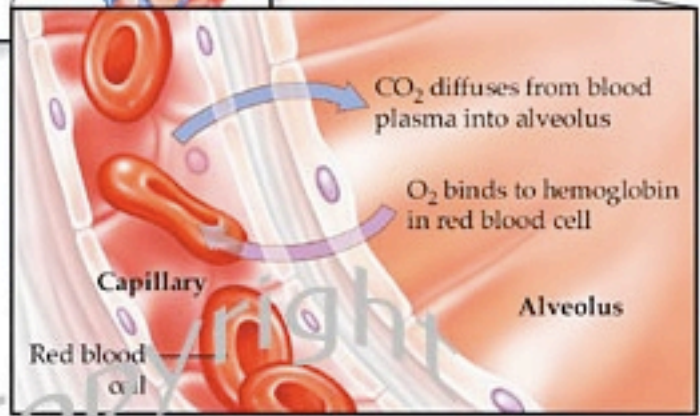
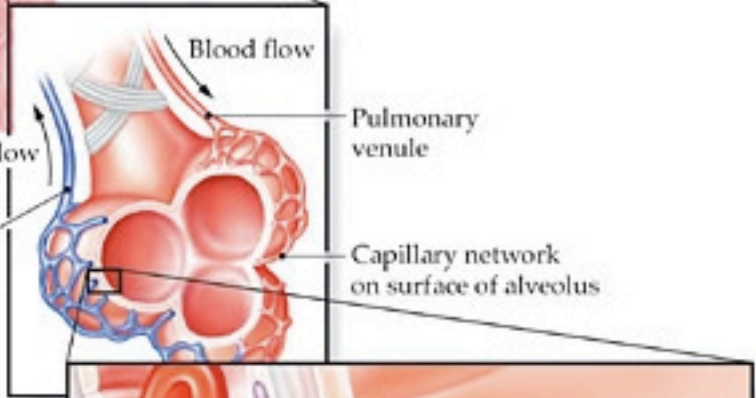
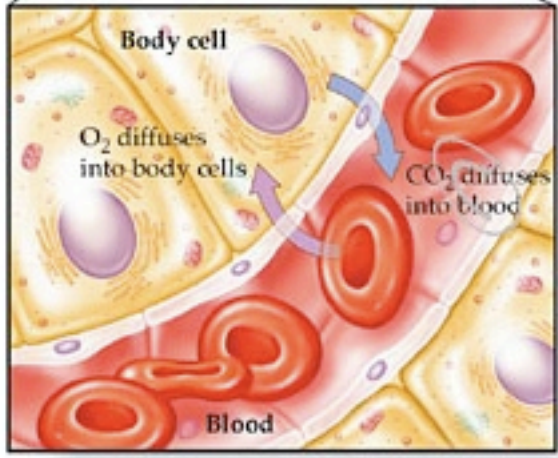
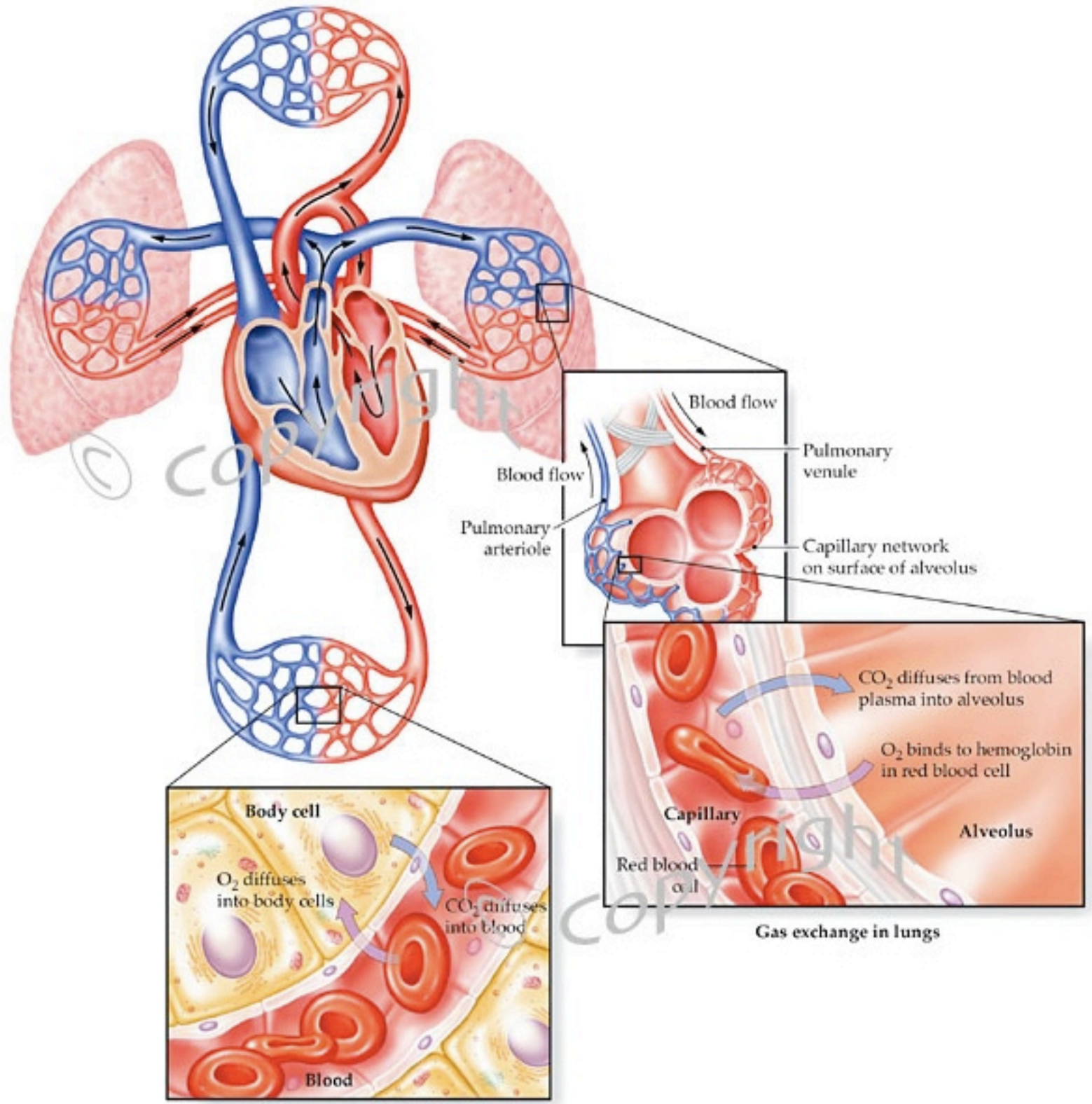






# Motion Control



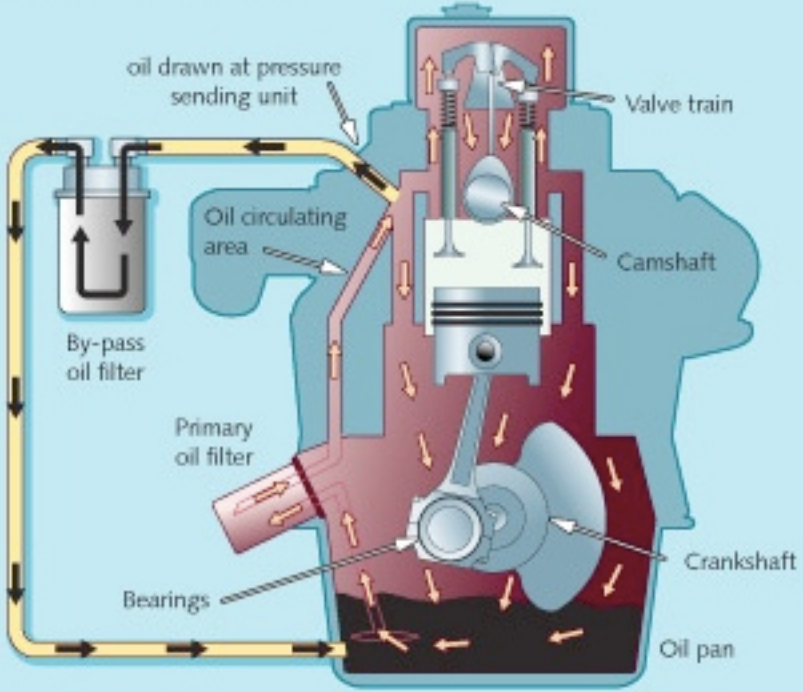


**Gas exchange in capillary beds throughout body tissues**

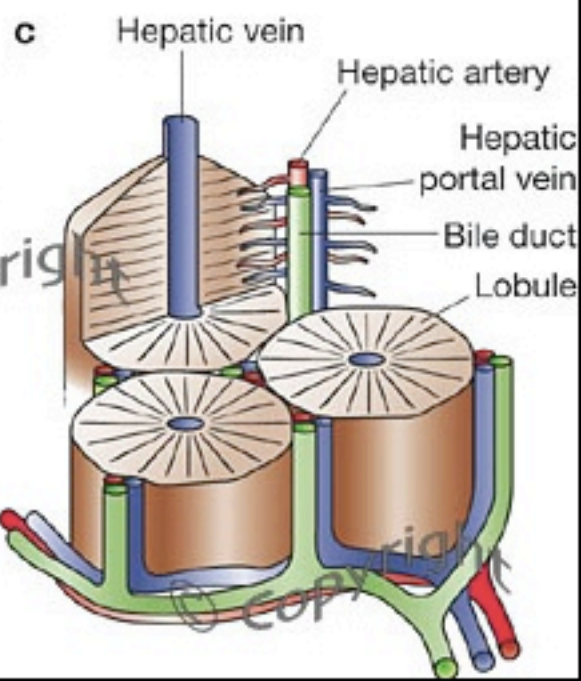
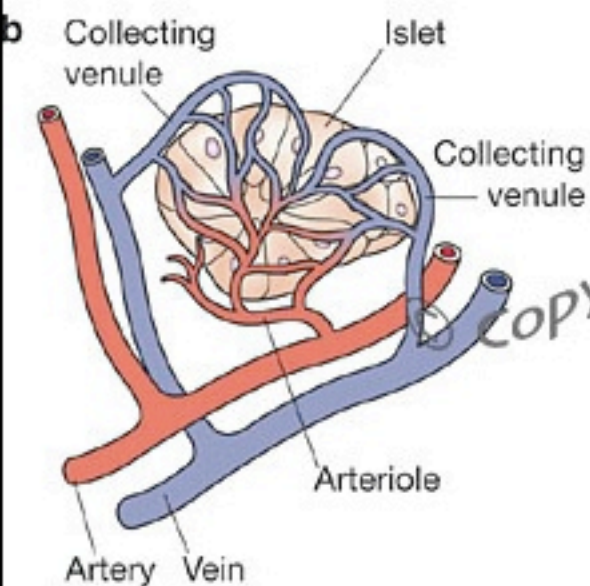
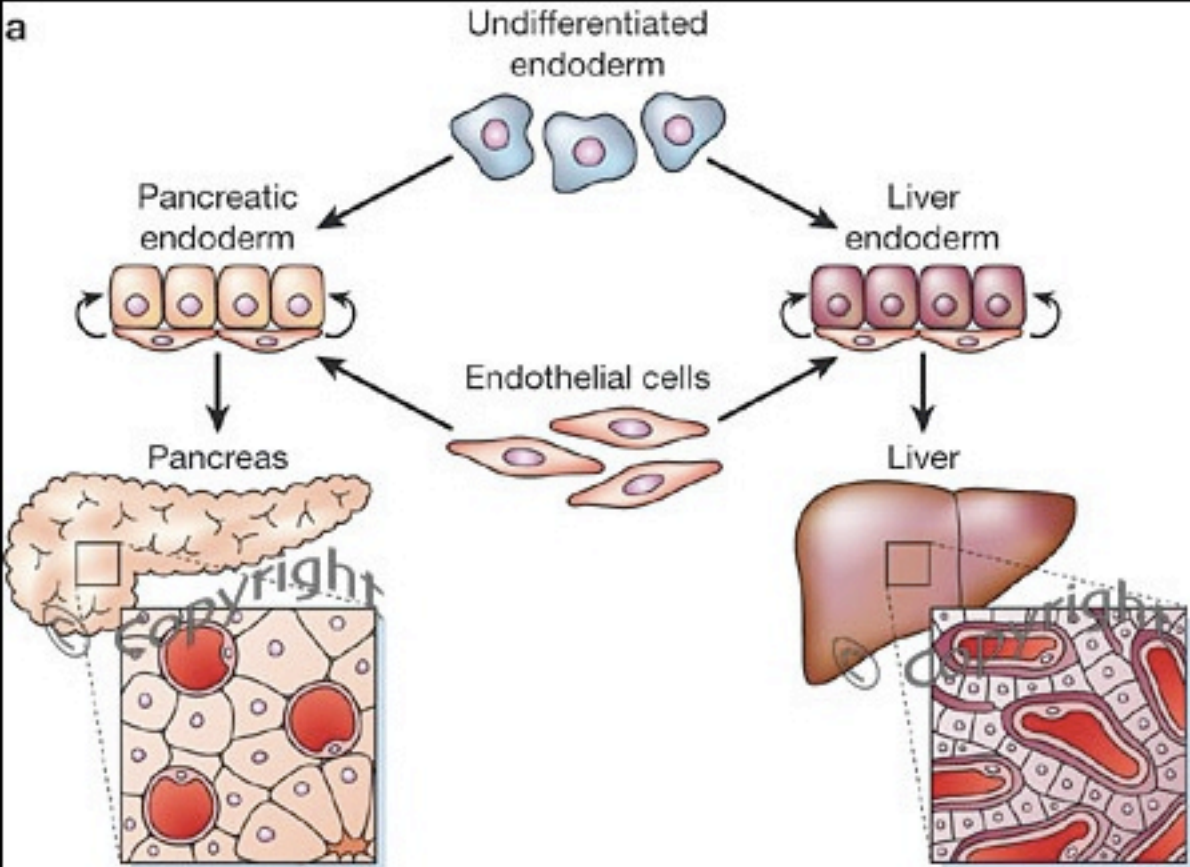
**Gas exchange in lungs**



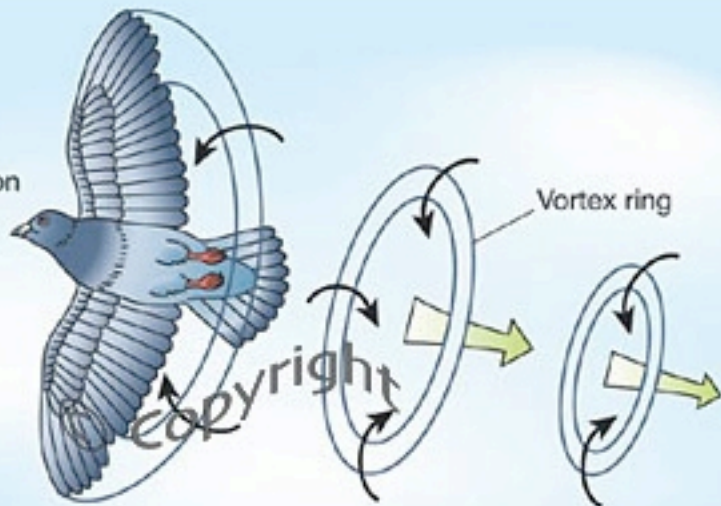
# Oil Lubrication By-Pass System







Pigeon



Vortex ring

Air

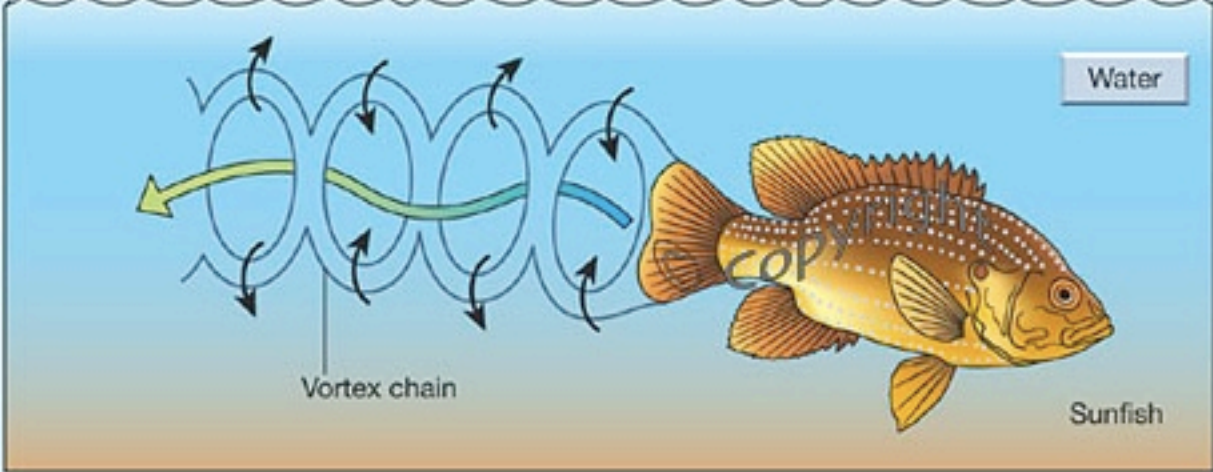


copyright

Horseshoe vortex

Surface

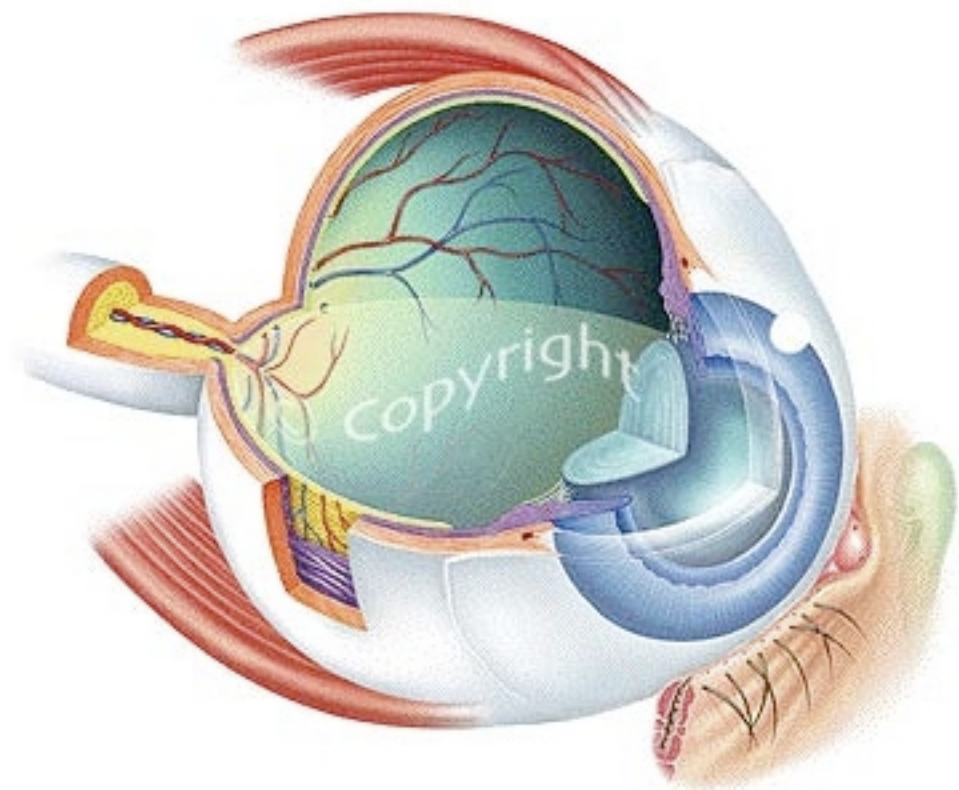
Water strider



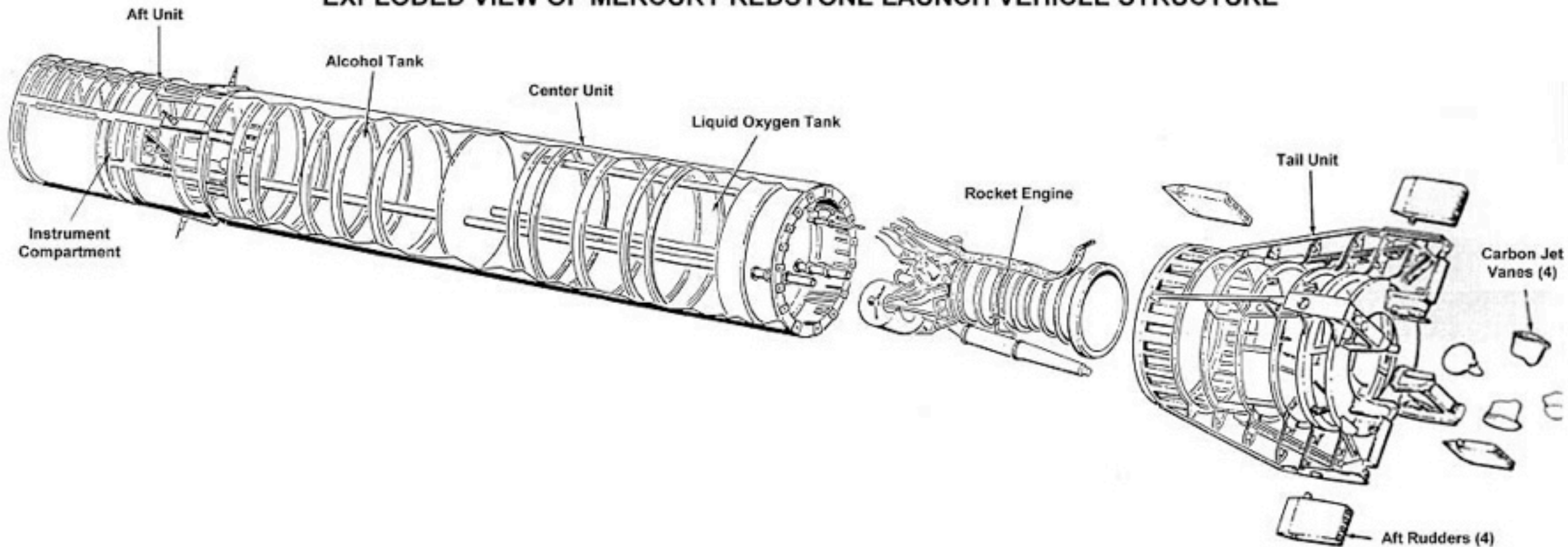
Water

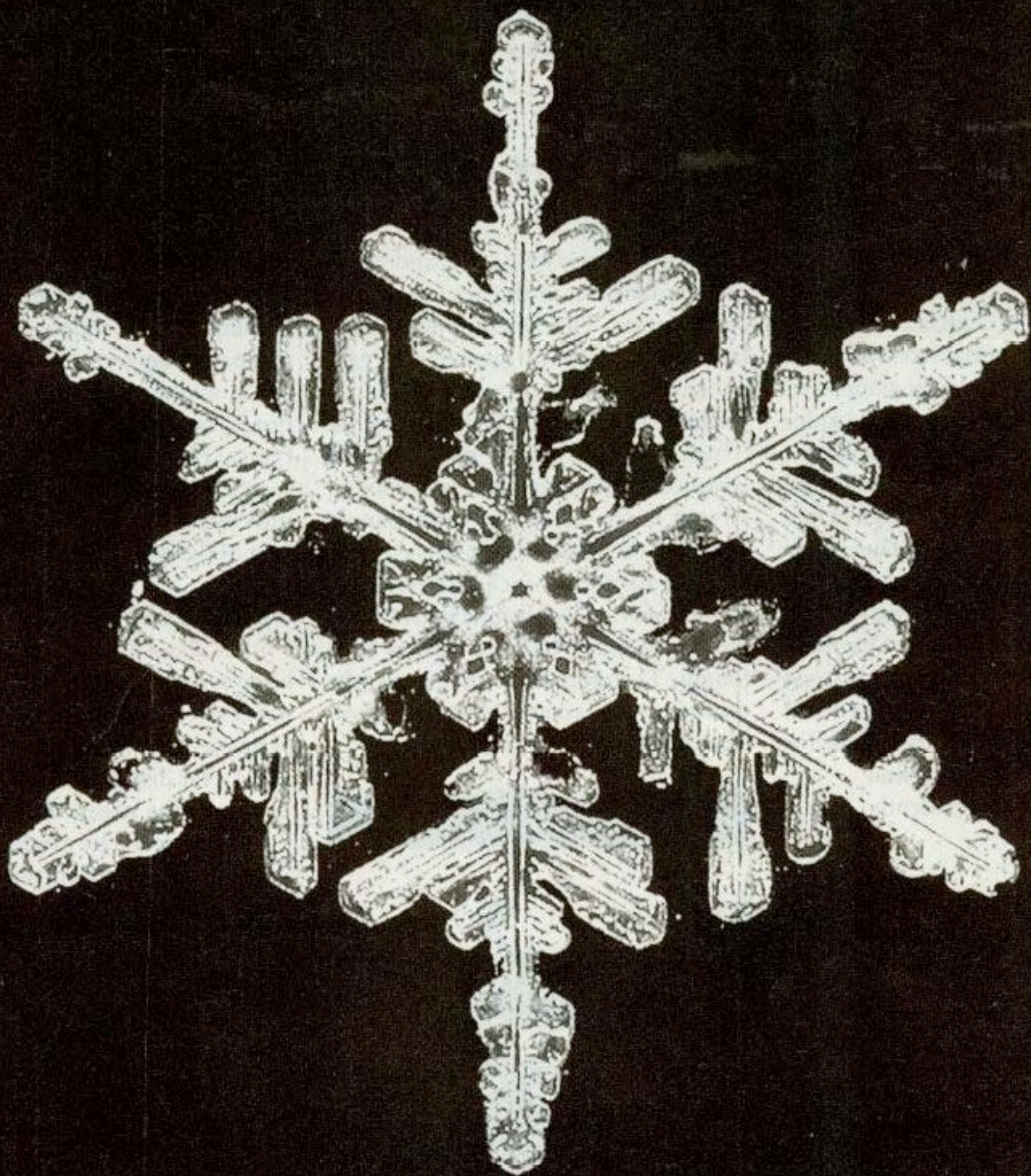
Vortex chain

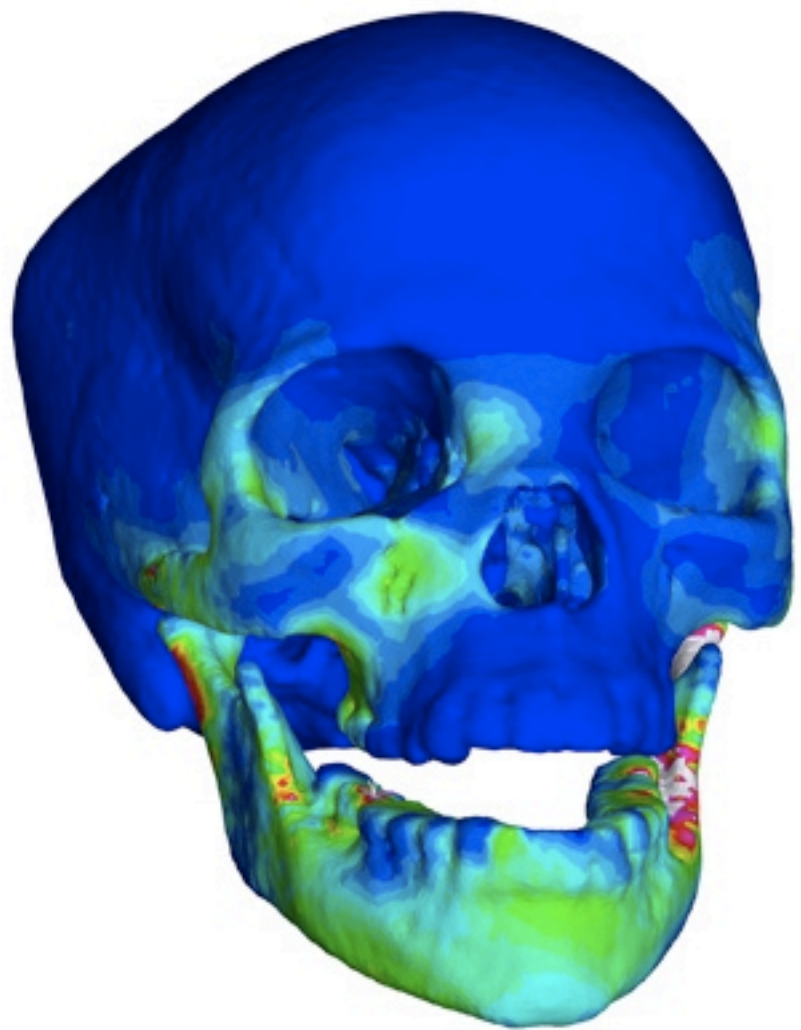
Sunfish



# EXPLODED VIEW OF MERCURY REDSTONE LAUNCH VEHICLE STRUCTURE





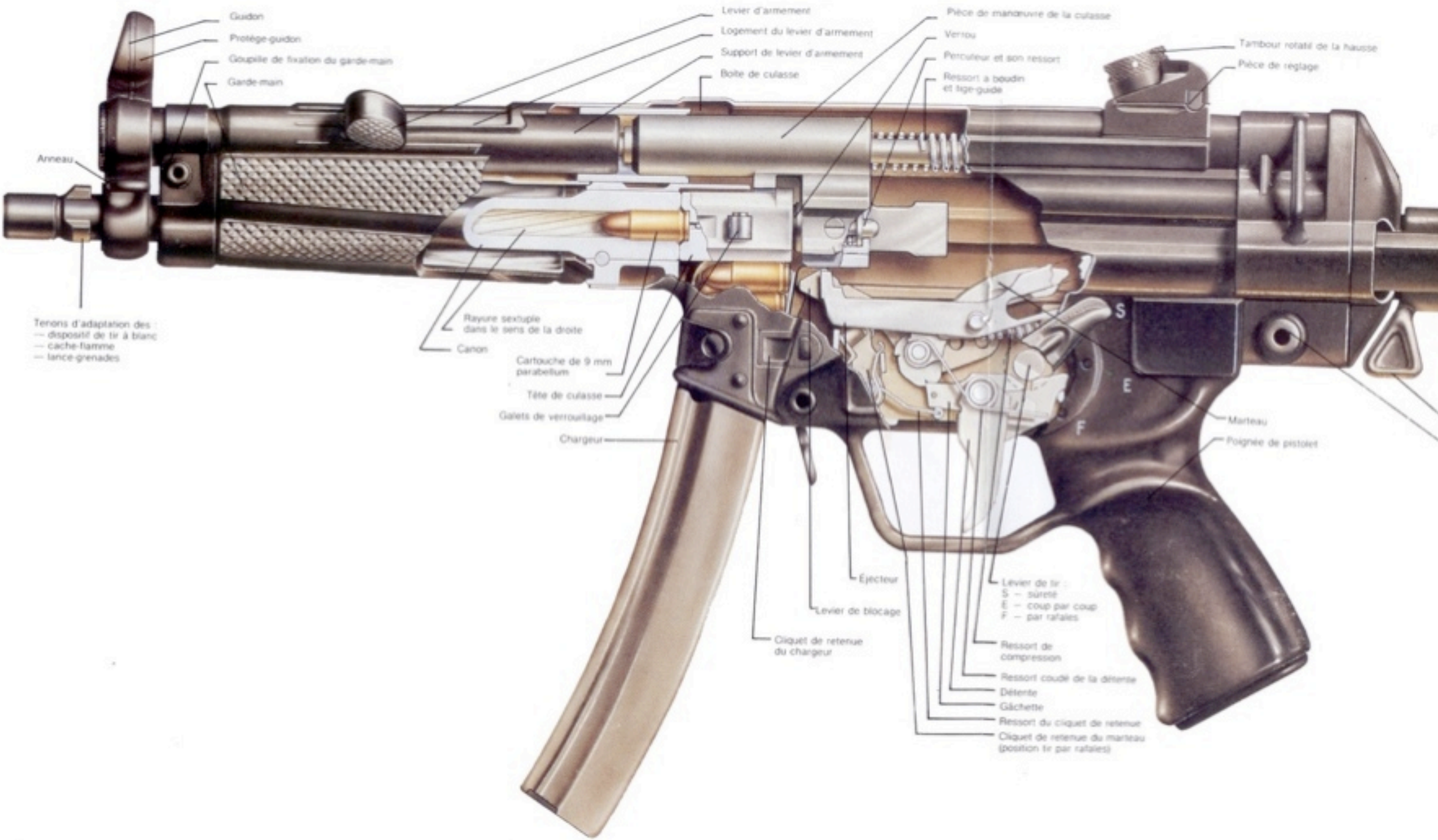












Guidon  
Protège-guidon  
Goupille de fixation du garde-main  
Garde-main

Anneau

Tenons d'adaptation des  
— dispositif de tir à blanc  
— cache-flamme  
— lance-grenades

Levier d'armement  
Logement du levier d'armement  
Support de levier d'armement  
Boîte de culasse

Pièce de manœuvre de la culasse  
Verrou  
Percuteur et son ressort  
Ressort à boudin et lige-guide

Tambour rotatif de la hausse  
Pièce de réglage

Rayure sextuple dans le sens de la droite  
Canon

Cartouche de 9 mm parabelum  
Tête de culasse  
Galets de verrouillage  
Chargeur

Éjecteur  
Lever de blocage  
Cliquet de retenue du chargeur

Lever de tir :  
S — sûreté  
E — coup par coup  
F — par rafales

Ressort de compression  
Ressort coudé de la détente  
Détente  
Gâchette  
Ressort du cliquet de retenue  
Cliquet de retenue du marteau (position tir par rafales)

Marteau  
Poignée de pistolet

