

Experiment 1

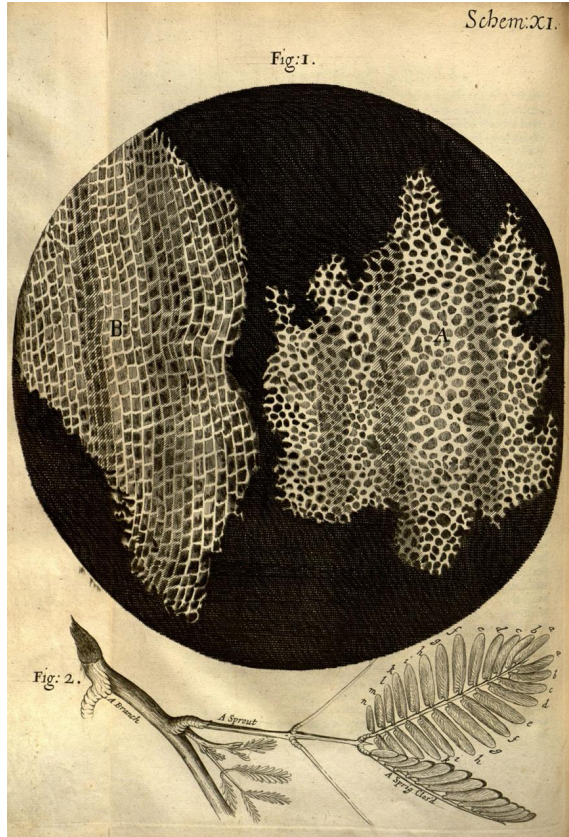
Microscope

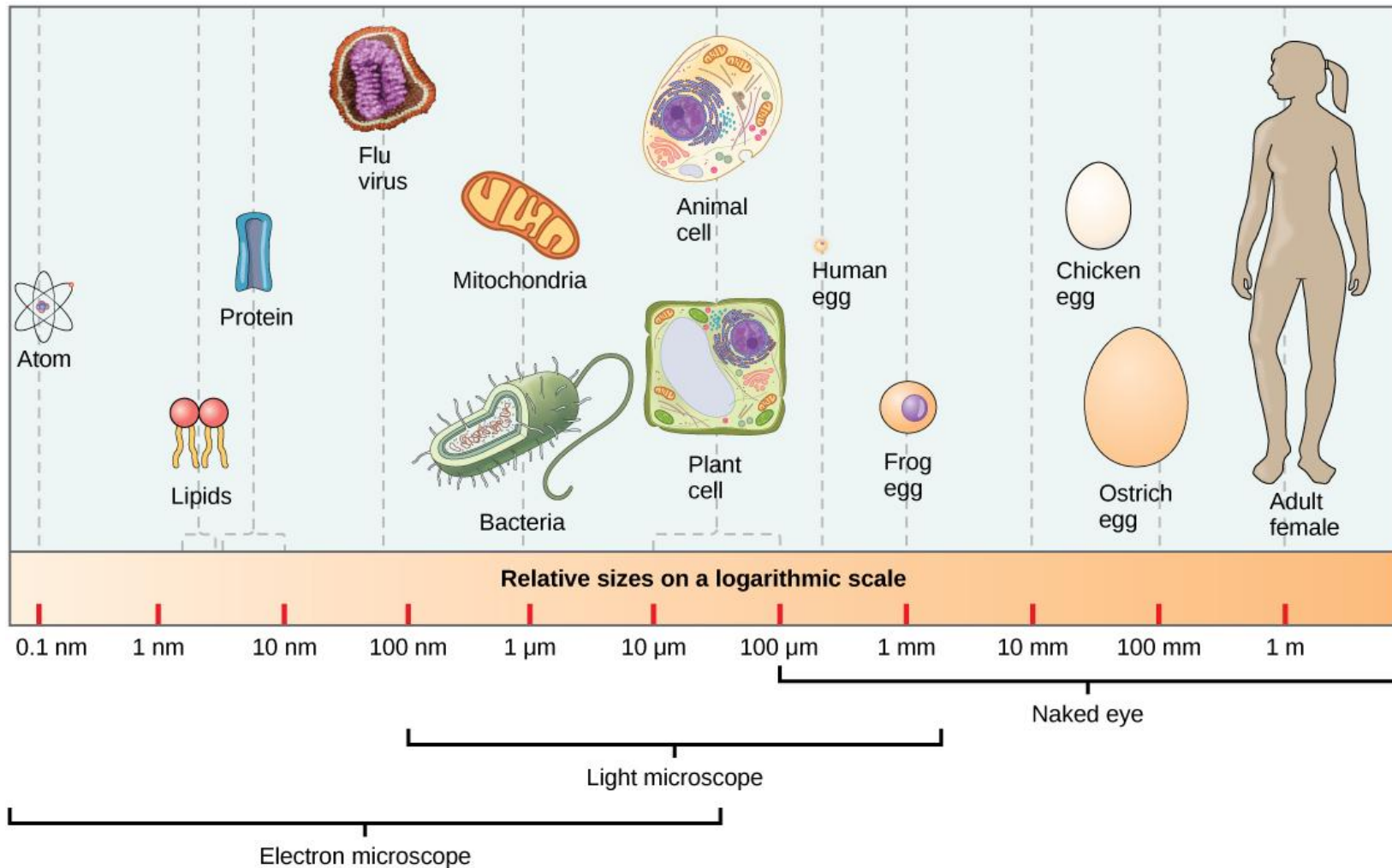


The invention of the first compound microscope was made by Dutchmen Hans and Zacharias Jansen and Hans Littersey in 1590

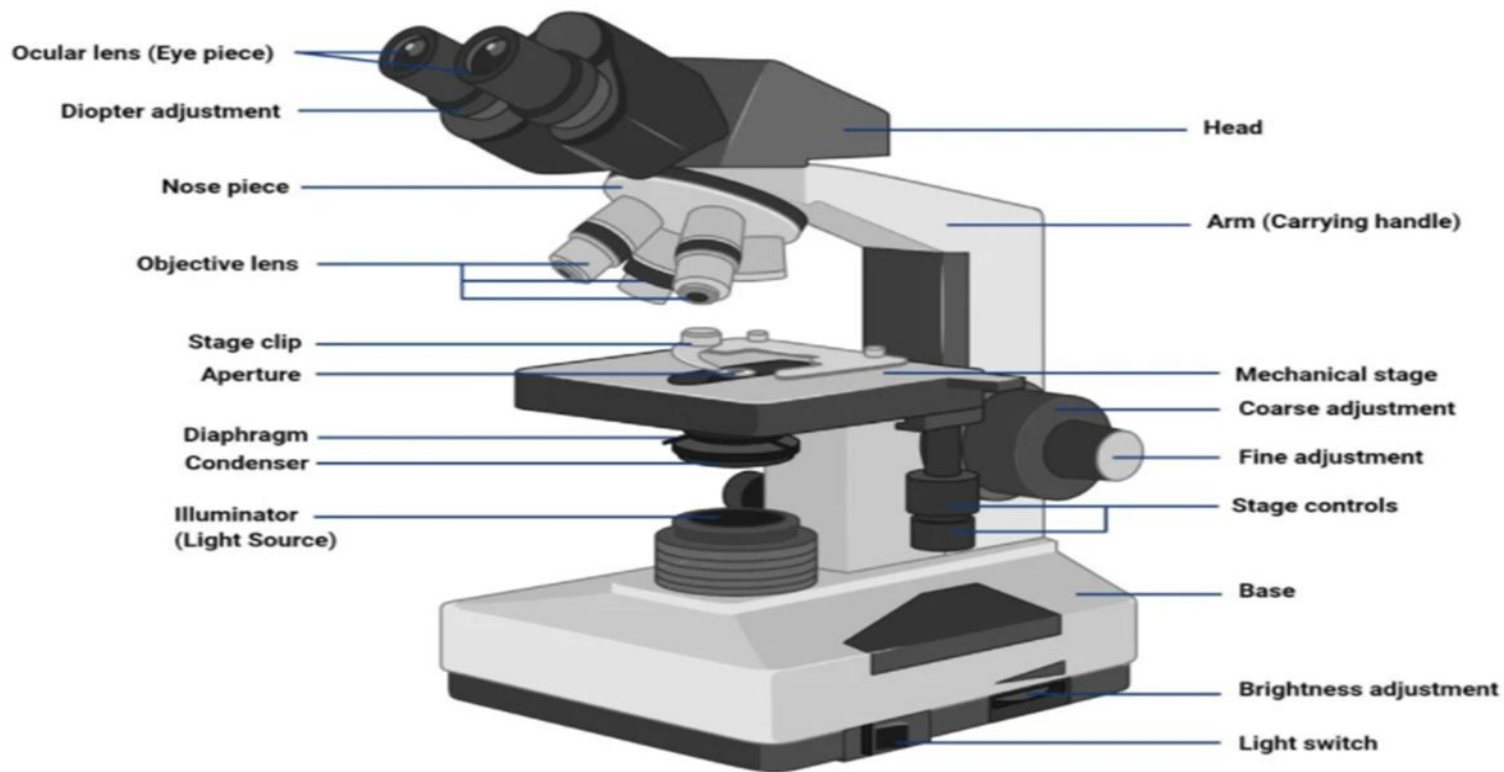
In the 17th century it was used systematically by the natural philosopher Robert Hooke

Robert Hooke





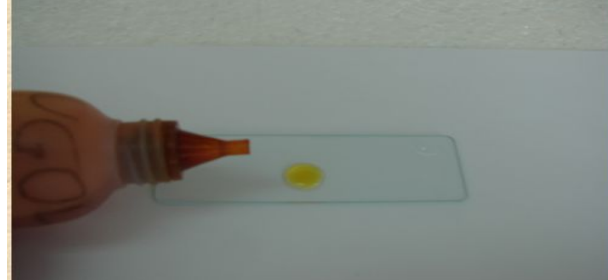
Microscope Parts



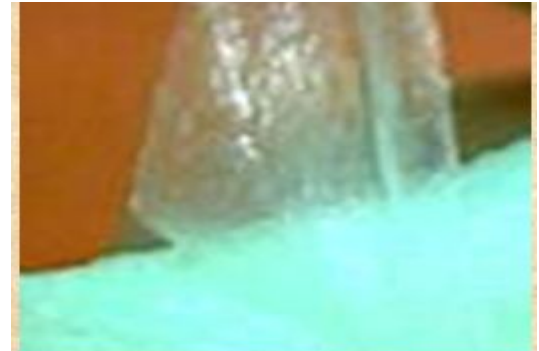
Experiment 2
Samples preparation for
microscope observation
Onion cells

PROCESS OF EXPERIMENT

1. Put a drop of lugol on a glass slide

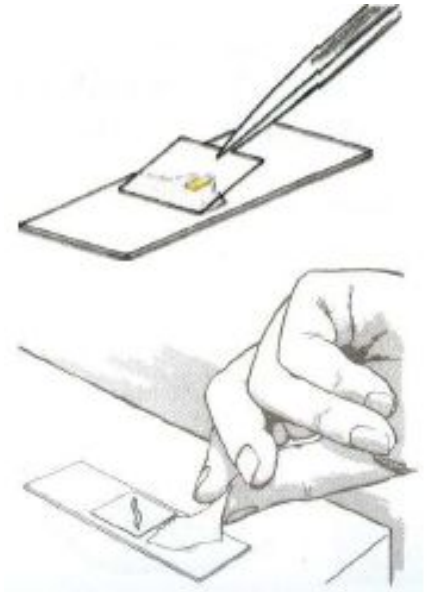


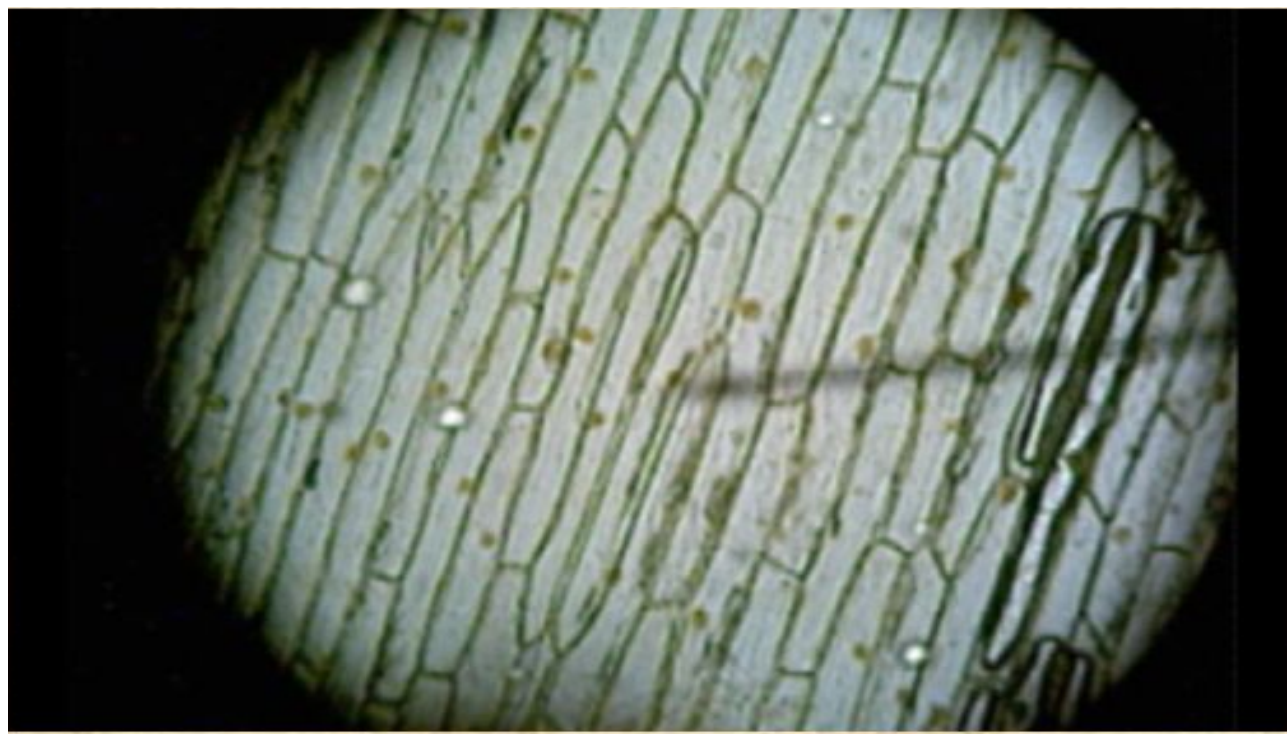
2. Remove a thin onion film



PROCESS OF EXPERIMENT

3. Place the membrane over the lugol drop
4. Wait for 2 minutes and then rinse the sample
5. Cover with a lid and remove the excess water

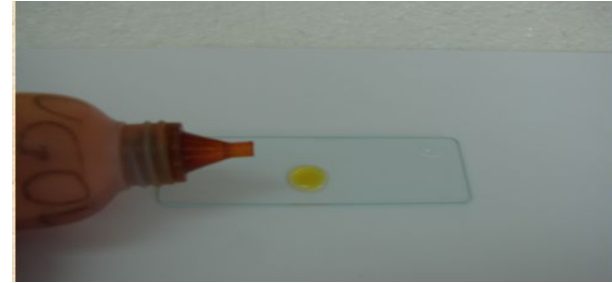




Experiment 3
Samples preparation for
microscope observation
Epithelial cells

PROCESS OF EXPERIMENT

1. A drop of lugol on the slide

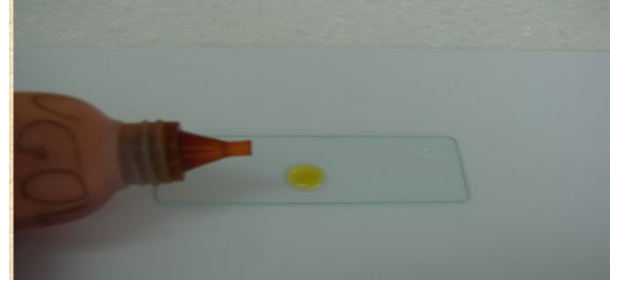


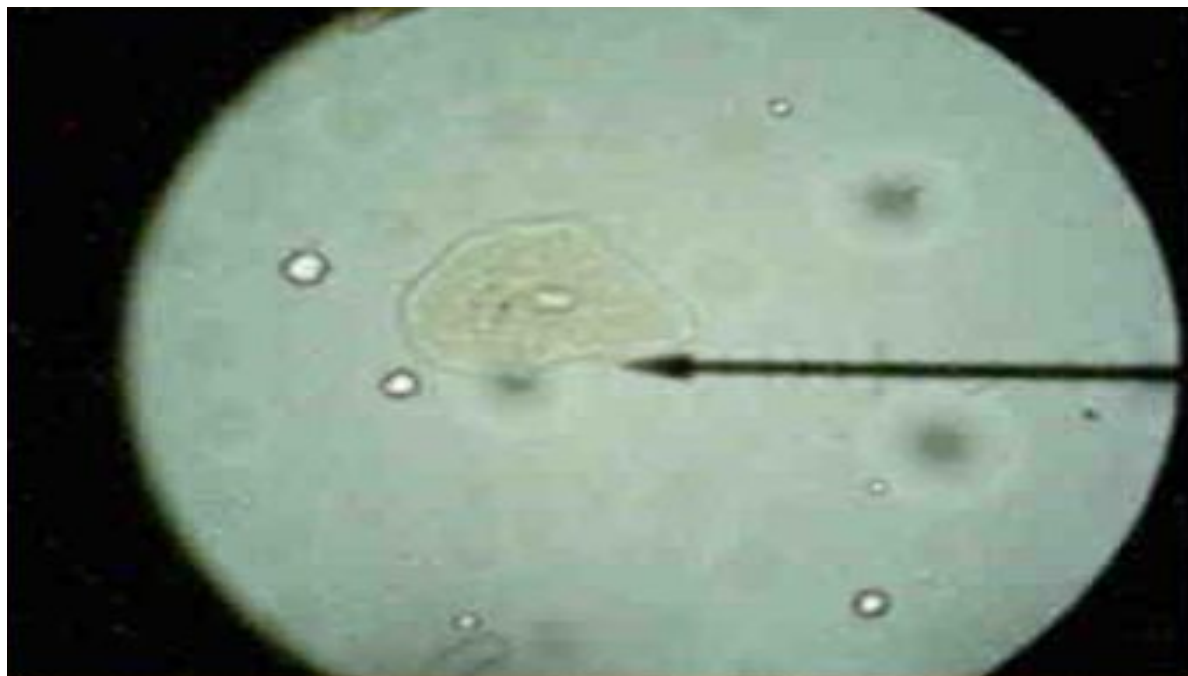
2. Scrape epithelial cells from the tongue or the inside of the cheek with a toothpick. Stir the toothpaste in the lugol drop



3. Wait for 2 minutes and then rinse the sample

4. Cover with a lid and remove the excess water





Experiment 4

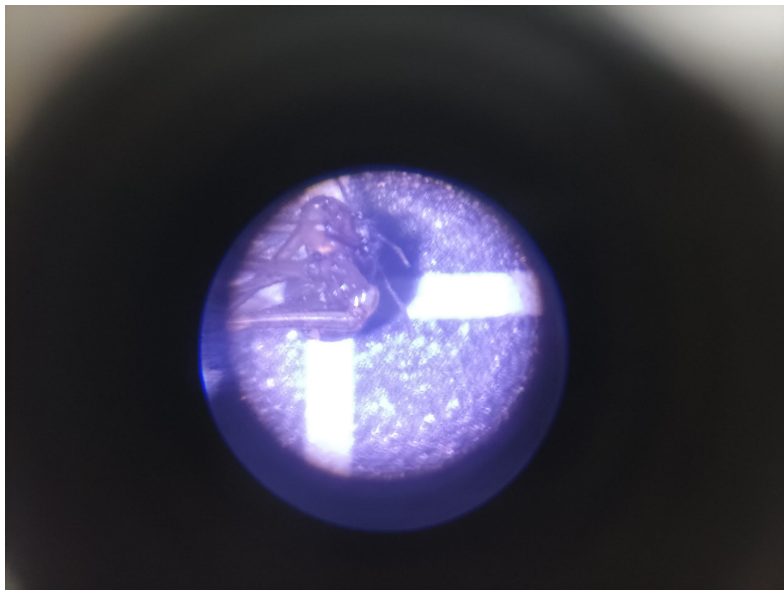
Stereoscope observation of leaves and insects



Fly head



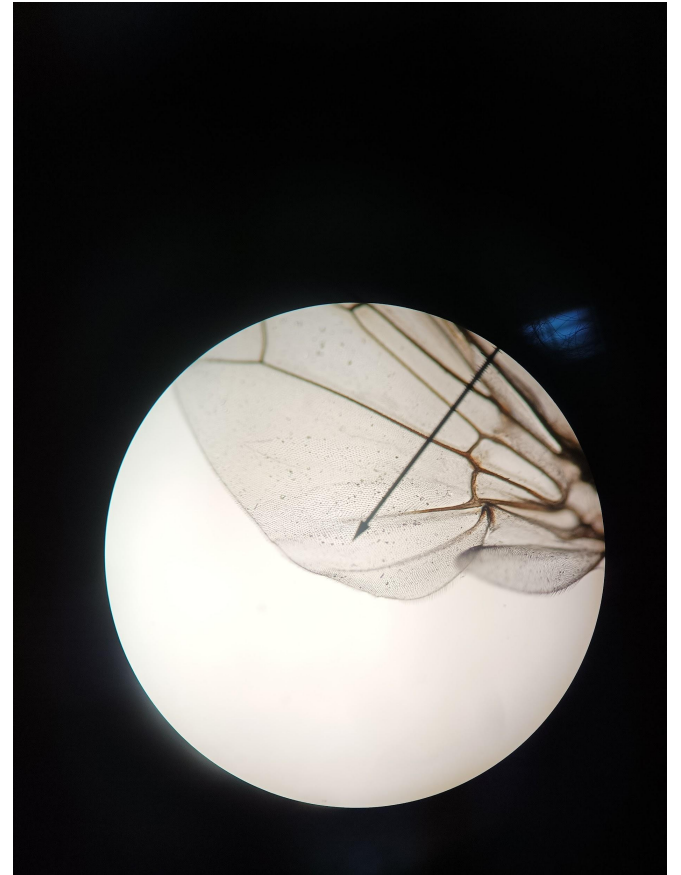
Sphinx heart



Spider head



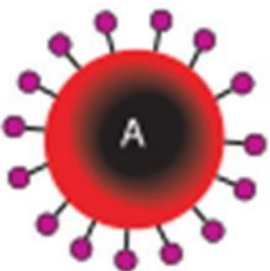
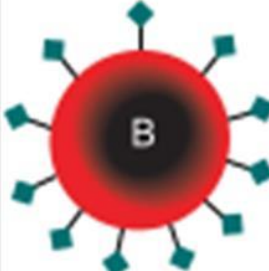
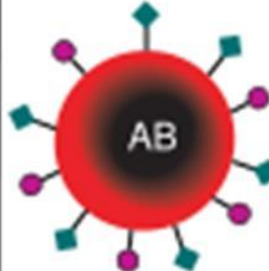
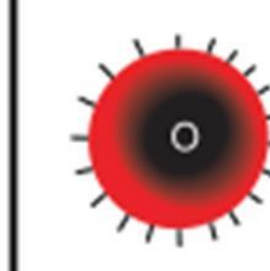






Spider leg



Sphinx
feather

Experiment 5

Blood types

	Group A	Group B	Group AB	Group O
Red blood cell type				
Antibodies present	 Anti-B	 Anti-A	None	 Anti-A and Anti-B
Antigens present	 A antigen	 B antigen	 A and B antigens	No antigens



We did an experiment and tried to find out from each person's blood samples who the father of the child Matthew is. We were able to tell by whether the tethers were bonding who the father of the child was.

Experiment 6

Microorganism cultivation

Microorganisms need carbon, nitrogen, various metal ions and water to grow.

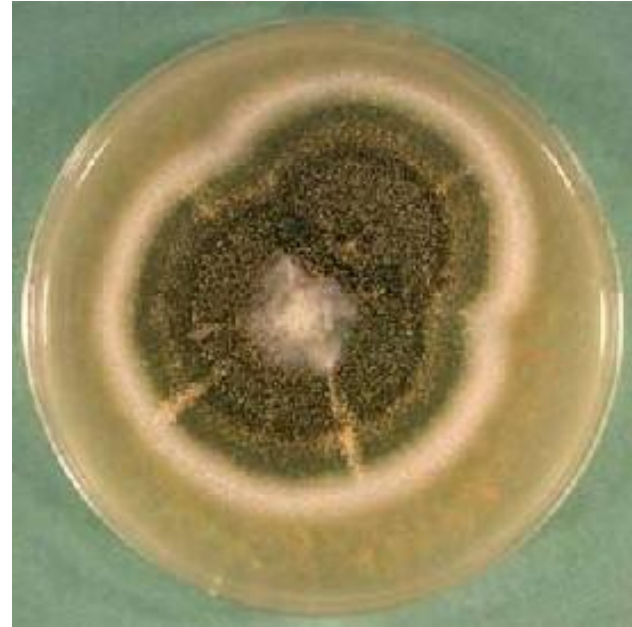


Candida Albicans



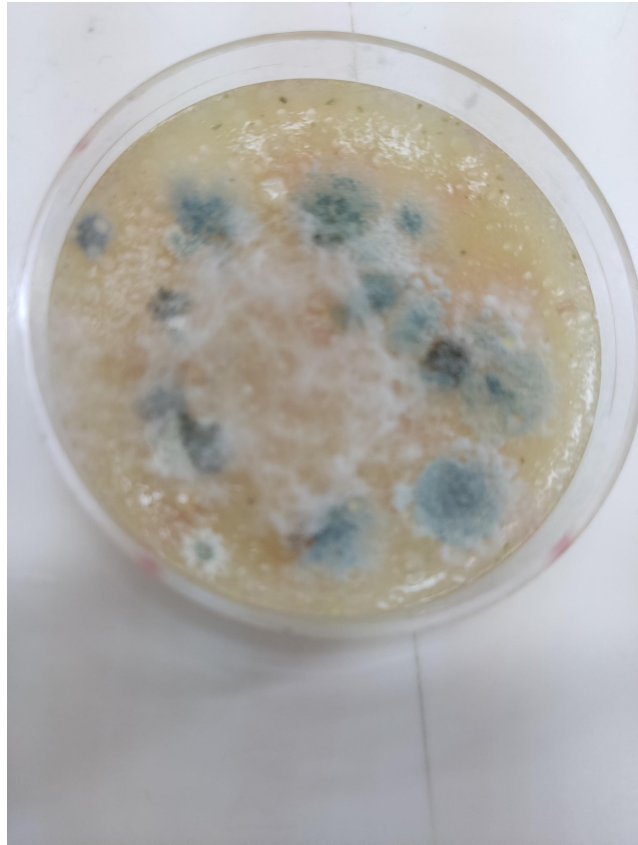
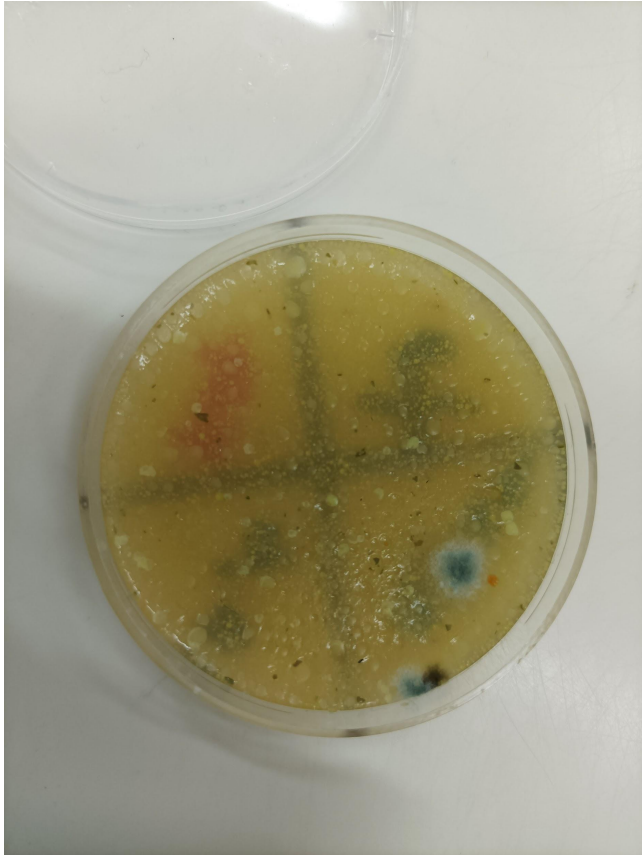


Green Mold *Trichoderma harzianum*



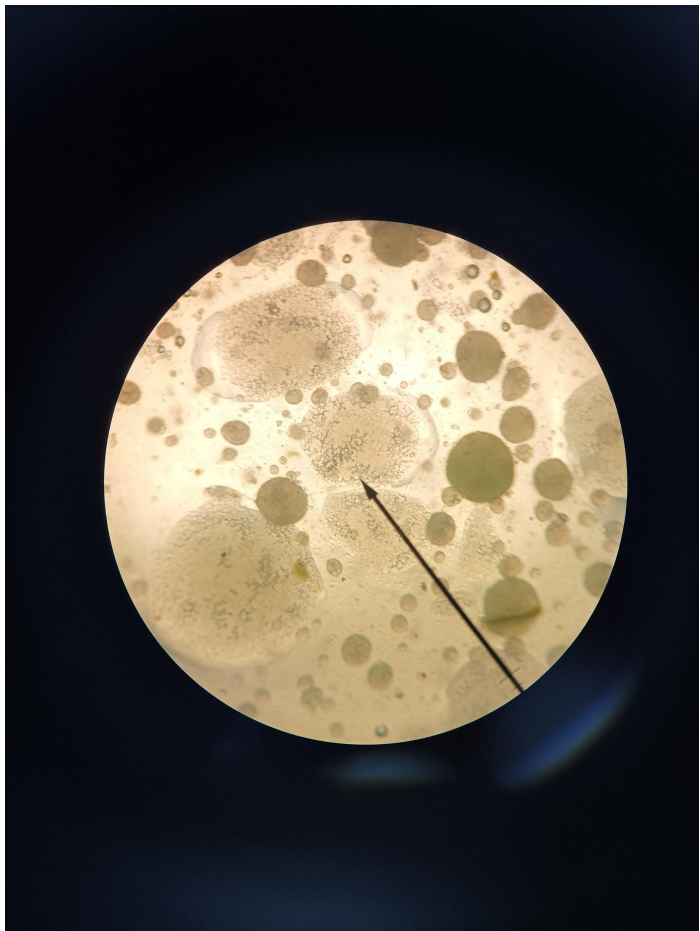
Black Mold *Aspergillus nidulaus*

Our cell-culture dishes

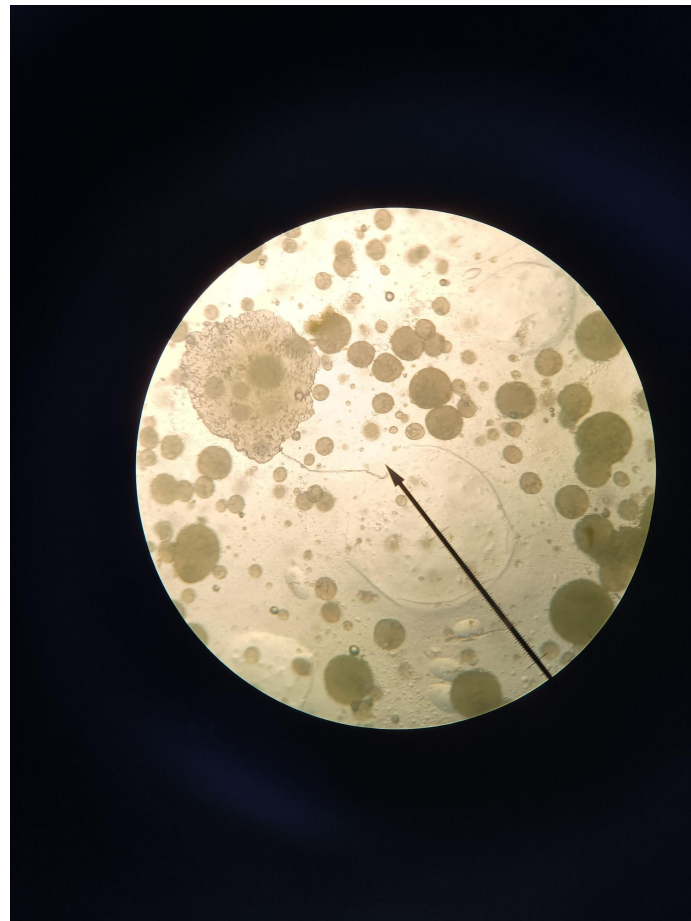


Experiment 7

Microscopic observation of microorganisms



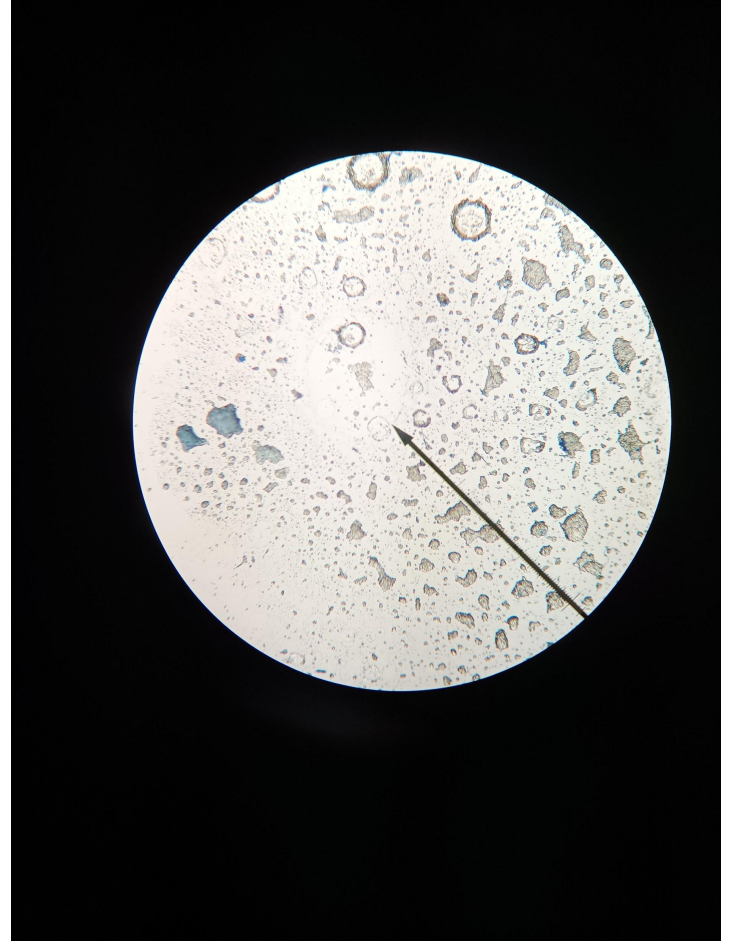
bacterial colonies





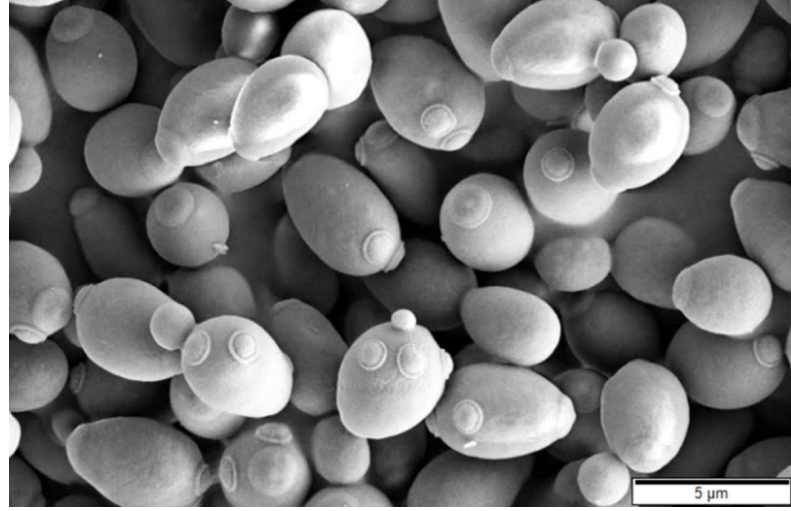
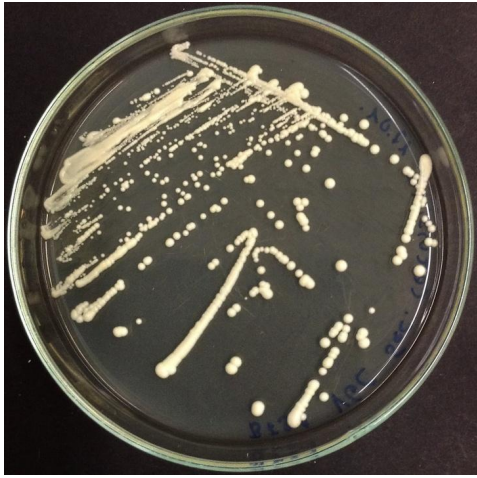
filamentous fungi

bacterial colonies
from up close



Experiment 8

Microscopic observation of saccharomyces



Αλκοολική ζύμωση

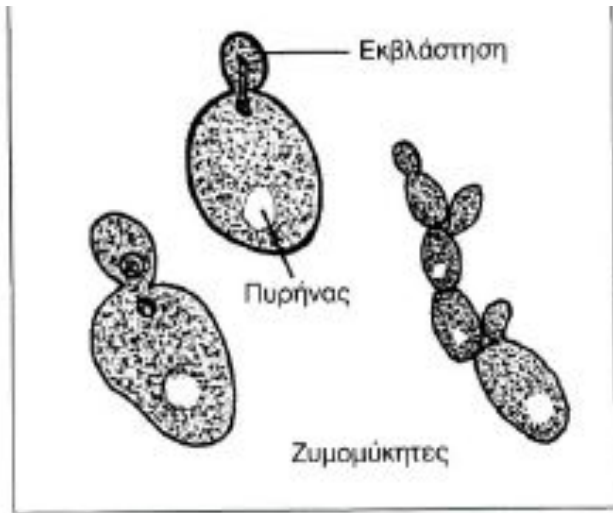
$C_6H_{12}O_6$
γλυκόζη

ένζυμο

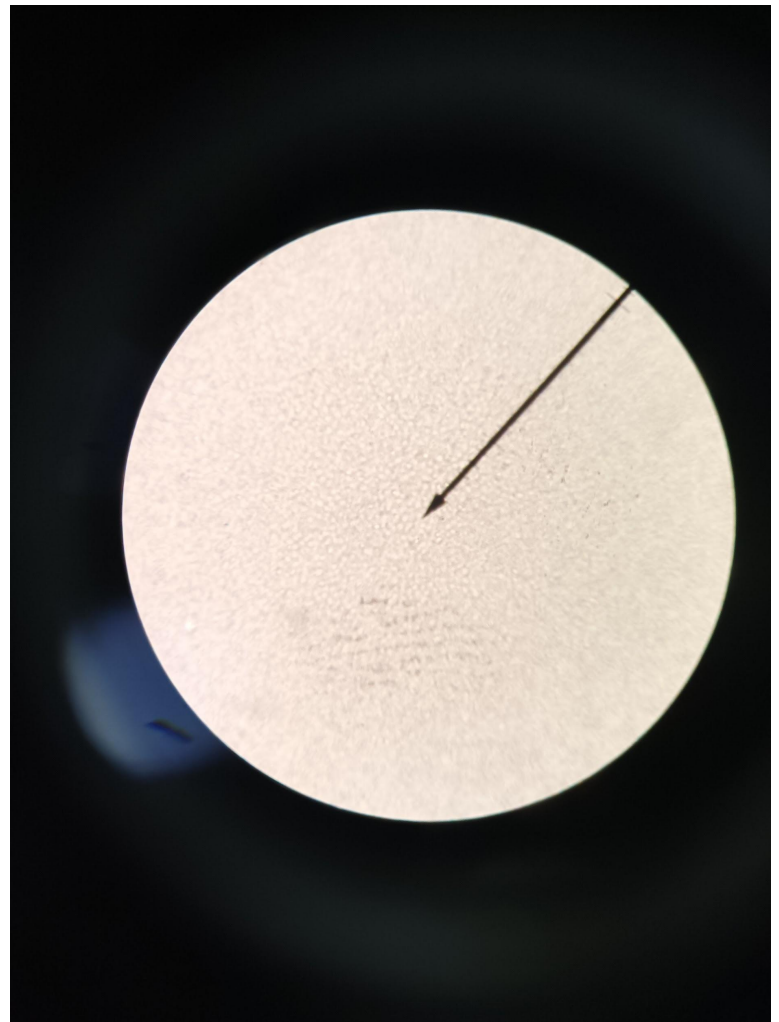


$2 CH_3CH_2OH$ + $2 CO_2$
αιθανόλη





Yeast



Experiment 9

Microscopic observation of yogurt microorganisms

Yogurt fungi

