Science Department.
Lab practice 1º ESO.

OBSERVING MICROORGANISMS.
USE OF THE STEREOMICROSCOPE: MOULDS AND LICHENS.

BASIC FACTS

Living things formed by one cell are called unicellular organisms. They are invisible to the naked eye. In order to observe them we need a microscope. Due to this, they are called microorganisms and they are very different from each other.

In this experiment you will observe some microorganisms and other living things from the first three kingdoms. You will use the stereomicroscope to see bread mould, grown by yourself. You will follow-up the growth of the mould over several days, recording it through out.

MATERIAL

- Stereomicroscope.
- A mouldy piece of bread.
- Tweezers.
- Lancet.
- Scissors.

- Watchglass.
- Eyedropper.
- Slides and cover slips.

PROCEDURE

AT HOME: damp a piece of bread and place it inside a jar or another transparent container that can be closed. Record the date and observe the bread piece over 7-10 days. Note down in your notebook any changes that occur.

IN THE LABORATORY:
1. Identify the parts of the stereomicroscope in front of you, according to the picture on the screen.
2. Take a piece of mouldy bread using the scissors and tweezers. Put it on the watchglass and observe it with the stereomicroscope.
3. Observe different samples with microorganisms, moulds and lichens.

ASK THE QUESTIONS

1. Name the parts of the stereomicroscope in the picture on the next page.
2. Draw a simple diagram of the mould sample you have observed with its main parts.
3. How do you think humidity affects the way the mould grows?
4. Write down your own conclusions about the mould experiment at home.

5. Have you observed prokaryotic cells in all your samples? Explain your answer.
6. What microscope magnification did you use to observe each sample?

a. Bacteria: _____ ;   b. Protozoa: _____ ;   c. Algae: _____

d. Mould (microscope): _____ ;   e. Mould (stereomicr.): _____

f. Lichen: _____

STEREOMICROSCOPE: