MICROSCOPE OBSERVATIONS GUIDELINES

TRANSPARENCY

What you should be trying to learn how to do here is to make careful, complete observations using the microscope AND, how to keep a record of them in a notebook.

The most important and interesting part for you is making the observations; the most important part for your getting credit is recording them in your notebook.[*]

Here are step by step instructions on

HOW to EARN CREDIT for MICROSCOPE PROJECTS:

1. Begin by writing the OPTIONAL PROJECT # and title at the top of a blank page in your notebook. ❑
2. READ over the instructions on the OPTIONAL handout. ❑
3. Follow the handout(s) directions & my examples to prepare the required slides, ❑
4. For EACH slide make and record an observation beginning on that same page of your notebook that includes AT LEAST all of the following:

DRAWINGS

A. The 2 best, labeled drawings that you can produce of each of the slides at the two highest magnifications possible, e.g.

- First Drawing: 40 X ❑
- Second Drawing: ---? X ❑

B. The labeling should include:

- size (mm), ❑
- magnification, ❑
- name(s) of objects observed, ❑
- name(s) of internal PARTS of objects, ❑
- color(s), etc... ❑

C. Artistic talent is NOT what you're being asked to display here. Just line drawings that show the

- BASIC SHAPES, ❑
- the # of OBJECTS, ❑
- their RELATIVE SIZE & POSITION, & ❑
- their COLOR(S)... ❑

DESCRIPTIONS

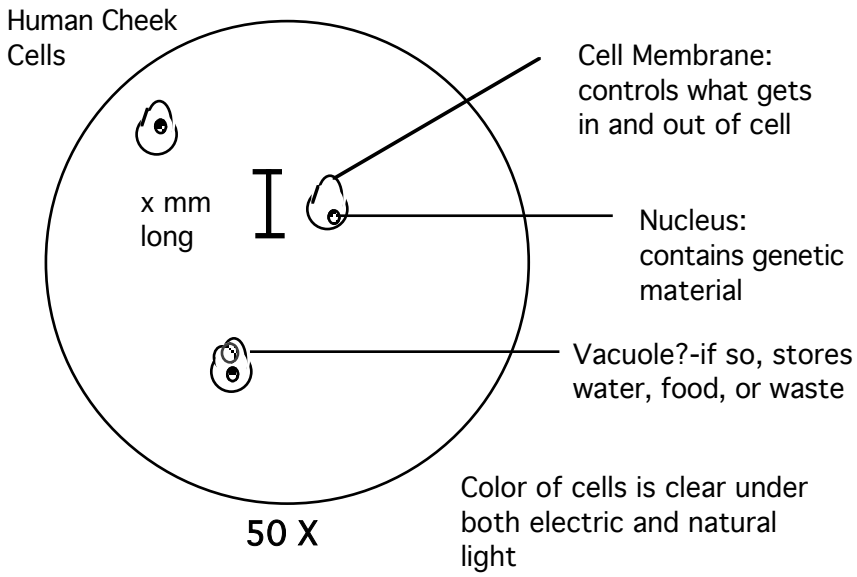
A. A written description of any movement or change

B. A written account of what the function(s) of the objects & structures that you observed might be—e.g.: "...they are cells...", "...they carry out photosynthesis...", "...these structures might be vascular tubes that carry liquids and minerals...", "...they are probably hairs that collect pollen..." etc....

See back for an example of what a page of your notebook *might* look like: --->

[*] these boxes are really notes for the teacher's introductory talk—to be given while going over the Handout in the Demo for the first Microscope Project of the year... Thus they are a little informal but I leave them on the students' copy anyway

Optional Project #3: Observations of Human Cheek Cells



NOTICE it is ***labeled with***
❑ size (in mm), ❑ magnification, ❑ name of object(s) being observed,
❑ name(s) of their internal structures (nucleus), and ❑ color(s) of those objects.

NOTICE it is **not necessarily a complete drawing *of every cell*** observed--just enough to get the pattern and to see at least one example of each different object or shape, etc...

NOTICE there is a ***written description*** that accompanies the drawing.

You can make a beautiful circle using a petri dish...