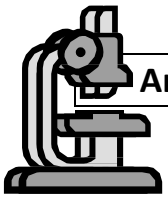


Animal Cells Lab: Animal Cell Name Period

__**Drawings MUST BE CHECKED while the object is in focus.**

__**Always carry a microscope upright and with 2 hands, one on the arm and one under.

__ / as you read. X as you do. Read to each other. Both of you need to learn to focus. READ!

The LAB:

_____1. Obtain a clean slide & coverslip. Or, wash them. A clean slide is VERY IMPORTANT this time.

_____2. Add one small drop of Iodine or other dye to the middle of the slide.

_____3. READ **ALL OF THIS DIRECTION BEFORE YOU DO anything**.

__ **If this hurts, you are doing it wrong. It SHOULD NOT HURT.**

__ Obtain a clean toothpick.

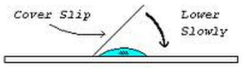
__ Use one end of your toothpick to GENTLY rub the inside of your cheek.

__ You should NOT SEE anything but saliva on your toothpick. The cells are microscopic.

__ You will get cells on your toothpick, but remember they are microscopic. You won't see them.

_____4. Use that same end of your toothpick to STIR the iodine dye on your slide. Some cheek cells should come off in your iodine, BUT you won't see them.

_____5. Hold the coverslip at an angle, resting one edge by the iodine. Then lower it on to



of the iodine and cheek cells. Tap lightly on the coverslip to help move air bubbles out.

_____6. Prepare your compound microscope by turning the light on or moving the mirror so it reflects light through the opening in the stage. Ask, if you think the lenses need cleaning. Do not use paper towel.

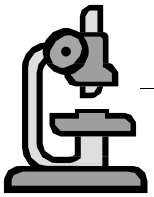
_____7. Place your slide on the microscope stage so the iodine is in the light. Move stage clips on slide to hold it.

_____8. Always USE a SLIDE, COVER SLIP and STAGE CLIPS with a compound microscope..

_____9. Set your microscope on the lowest power. Look at the numbers on the lenses.

_____10. "START CLOSE". Watch from the side and use the coarse adjustment wheel (the larger one) to move the objective lens close to the stage. This is what we mean by "START CLOSE".

_____11. **LOOK in the microscope eyepiece** for as you "FOCUS AWAY". Look for cells that look like pale yellow cornflakes (yellow from the iodine). Slowly move the large coarse adjustment wheel to move the lens away from the stage. STOP when you can see something yellow.



_____12. You are looking for one cell or a group of cells that are scattered, not clumped together. You need **one cell that has a nucleus you can see and is by itself**.

__ a) Hold the slide with both hands.

__ b) As you look through the eyepiece, slowly and steadily move your slide,

__ c) If NOTHING MOVES WHEN YOU MOVE your slide, you are NOT IN FOCUS. START over by starting CLOSE again and FOCUS AWAY again.

_____13. When you have found some cells, choose ONE CELL that has a nucleus. While watching it, carefully use 2 hands to move the slide so YOUR CHOSEN CELL is in the center.

_____14. Watch the cell as you increase the magnification. STOP when the cells go out of focus and refocus. Increase the magnification as much as possible. Use the fine adjustment wheel. If it will not focus, then you need to reduce the magnification and refocus.

_____15. Locate the nucleus, cytoplasm, & cell membrane. Use the text if you locate more parts.

_____16. Have your cell focus checked BEFORE YOU DRAW. Check _____

_____17. Use plain paper & pencil to do an outline drawing, about as large as your hand, of your ONE cell. Add the above parts. Do not sketch or shade. **Draw only parts you see.** Check _____

**YOU MUST HAVE YOUR DRAWING CHECKED WHILE IN FOCUS.

_____18. Label. Draw a straight line out to the right. Label only the parts you found. 1 pts each_____

_____19. Return your slide and coverslip to the cleaning area. Turn off the light. Change to LOW POWER. Move the stage AWAY from the stage.