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## PLANT CELLS - ONION SKIN

## Purpose:

The purpose of this activity is to view plant cells under a microscope, in order to gain a more clear understanding of the appearance of cells in multicellular plants.

## Equipment:

- Microscope
- Iodine
- Microscope Slide
- Eye Dropper
- Slide Cover
- Onion
- Tweezers
- Knife


## Procedure:



1. Using the tweezers, peel off a single layer of onion skin from the inner curve of a layer of onion (if you cannot see through it, it is too thick).
2. Carefully lay the onion skin on your slide, making sure to lay it flat, do not let it fold.
3. Place a small drop of iodine on the onion skin.
4. Place the slide cover, properly, over the onion skin.
5. Observe the onion skin with the microscope.
a. Complete a drawing of the onion skin cells at lower power, focusing on the layout of the cells - what shape are they, how do they fit together (tight/spaced), are they similar or different
b. Complete a drawing of a single onion skin cell high power, focusing on the components of the individual cell - can you see organelles
6. Label your slide with a marker, and save it for future viewing.

Note: There are several safety precautions to consider:

- The juice from an onion can sting your eyes, wash your hands when you are done handling it.
- Iodine is poisonous, keep it away from your mouth and wash your hands once you are done using it.
- Iodine will stain both your skin and your clothes, handle it carefully.
- Knives are sharp, take extra care to avoid cutting yourself.

Notes: You will be completing a project based on your work with microscopes throughout this unit. If there are any other observations/notes you think you should take, I recommend you do so.
If you wish, you may use your phone to take images throughout this activity.

## Observations:

Notes:

Notes:


