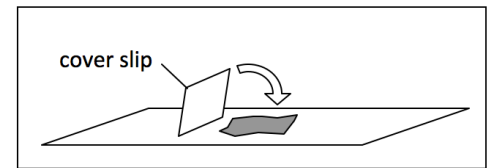


LAB 6: COMPARING CELL TYPES & USING MICROSCOPES INSTRUCTIONS

Instructions for Creating Wet-Mounted Slides for Observation:

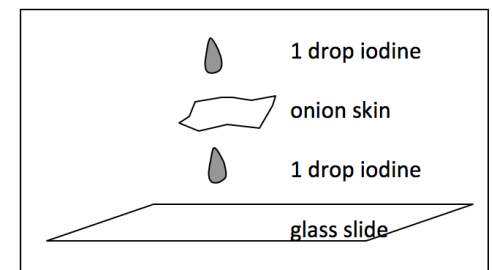
1. Pond water wet mount

- Add 1 drop of pond water to the center of a glass slide.
- Carefully stand a thin glass cover slip on its edge next the drop of pond water.
- Slowly lower the other side of the cover slip until it covers the pond water drop. The pond water will spread out under the cover slip. Some may squish out the sides; that's okay.
- If there are air bubbles, gently tap on the glass cover slip to "chase" them out.
- Follow the directions on the first page to observe the pond water specimen.
- Observe the pond water at 40x, 100x, and 400x total magnification.**



2. Onion cell stained wet mount

- Add 1 drop of iodine to the center of a glass slide. Be careful! Iodine can stain your clothes.
- Take a small piece of onion. Use tweezers to peel off the skin from the underside (the rough, white side) of the onion. Throw the rest of the onion piece away.
- Carefully lay the onion skin flat in the center of the slide on top of the iodine.
- Add 1 drop of iodine to the top of the onion skin.
- Stand a thin glass cover slip on its edge near the onion skin, next to the drop of iodine.
- Slowly lower the other side of the cover slip until it covers the onion skin completely. If there are air bubbles, gently tap on the glass to "chase" them out.
- Follow the directions on the first page to observe the onion skin cells.
- Observe the onion skin cells at 40x, 100x, and 400x total magnification.**



3. Human cheek cell stained wet mount

- Add a small drop of methylene blue to a clean dry slide.
- Gently scrape the inside of your mouth with the flat side of a toothpick. (Don't worry; these cells are constantly being shed from your mouth so they won't be missed!) Don't poke yourself with the toothpick!
- Stir the end of the toothpick in the methylene blue; careful not to push the stain off the slide.
- Stand a thin glass cover slip on its edge near the drop of methylene blue.
- Throw the toothpick away.
- Follow the directions on the first page to observe the cheek cells.
- Observe the cheek cells at 40x, 100x, and 400x total magnification.**

4. Unstained spinach leaf cuticle

- Collect a spinach leaf. Break the spinach leaf carefully so you can get the "skin" (also known as the **cuticle**) of the spinach leaf.
- Carefully lay the cuticle flat on a clean slide using tweezers to pull out any wrinkles. Do NOT add a cover slip.
- Follow the directions on the first page to observe the spinach cuticle cells.
- Observe the spinach cells at 40x, 100x, and 400x total magnification.**