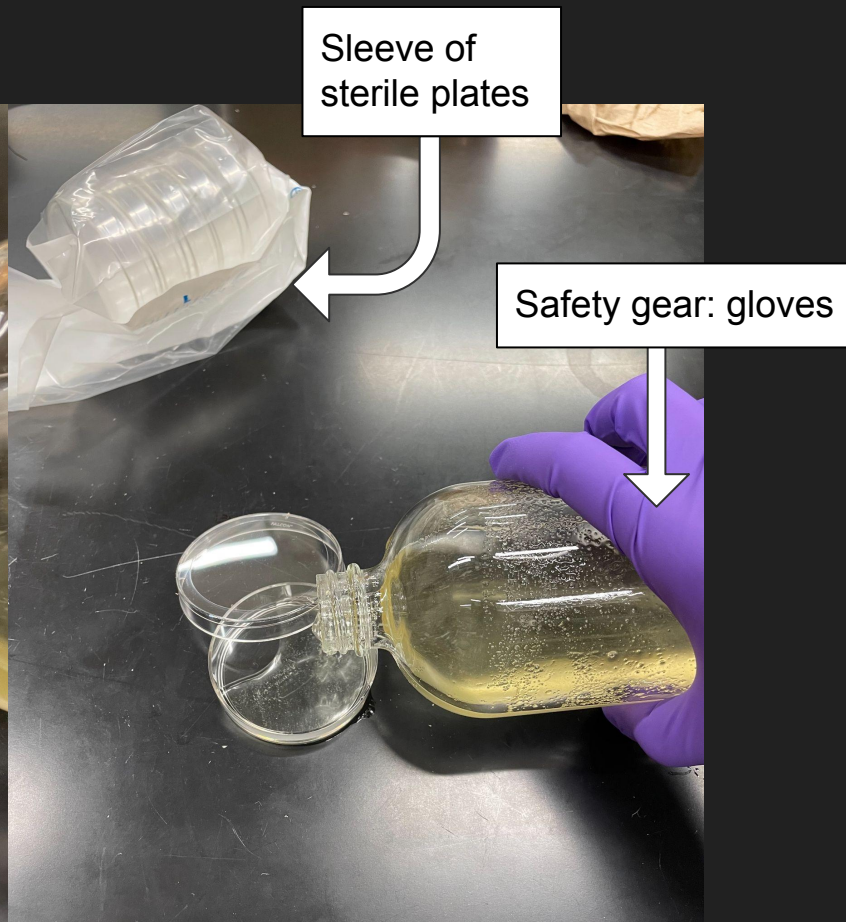
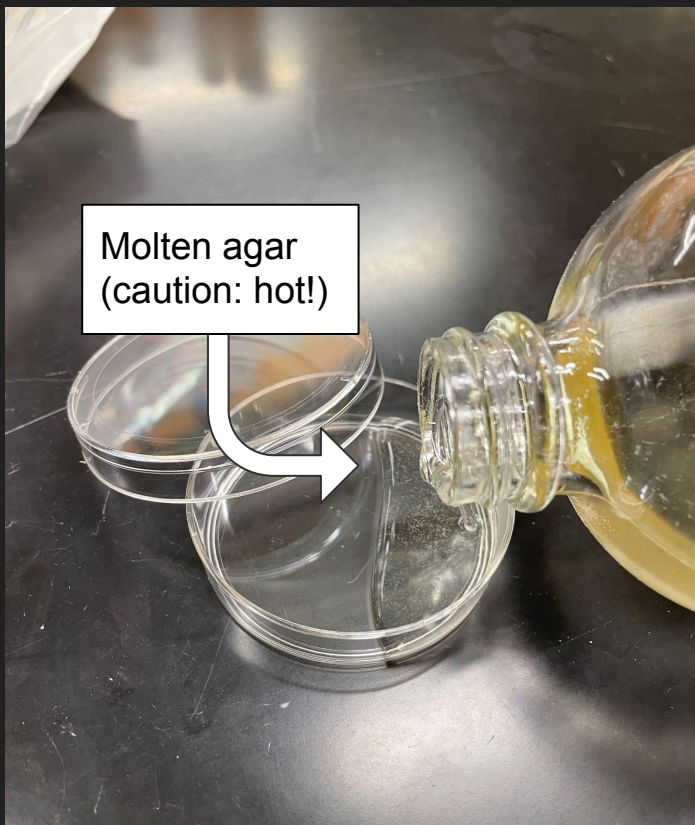


Fungal Lab Procedures



Part 1

Make agar plates



Part 2

Plate a leaf sample: setup

Pre-made
agar plates

10% Bleach

70% ethanol

Keep tweezers
and scissors in
70% ethanol

Diseased leaf sample

Clean workbench



Part 2

Plate a leaf sample: prep leaf sample

5 by 5 mm
square

Scissors

Tea strainer

Tweezers



Part 2

Plate a leaf sample

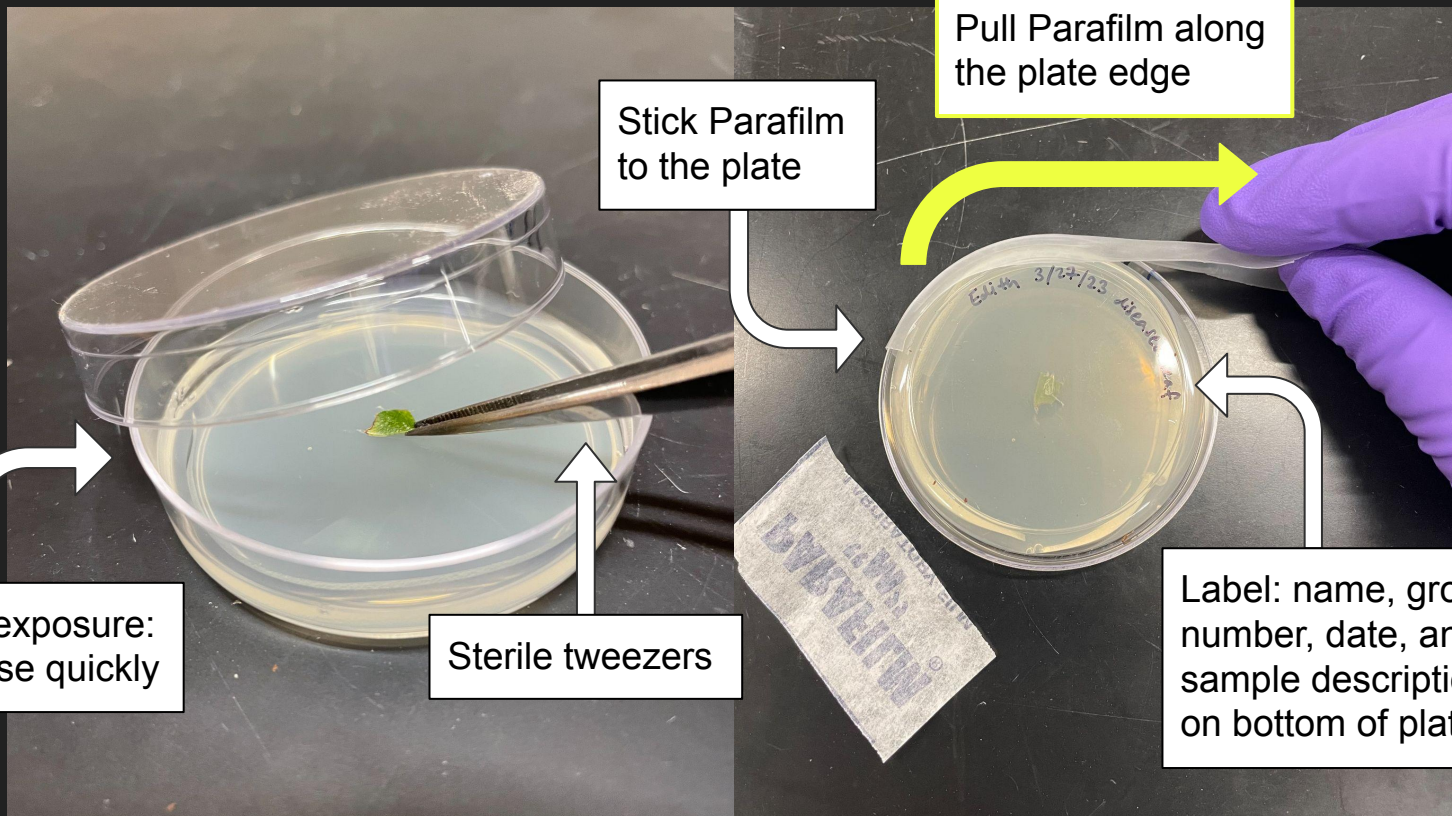
Minimize air exposure:
open and close quickly

Sterile tweezers

Stick Parafilm
to the plate

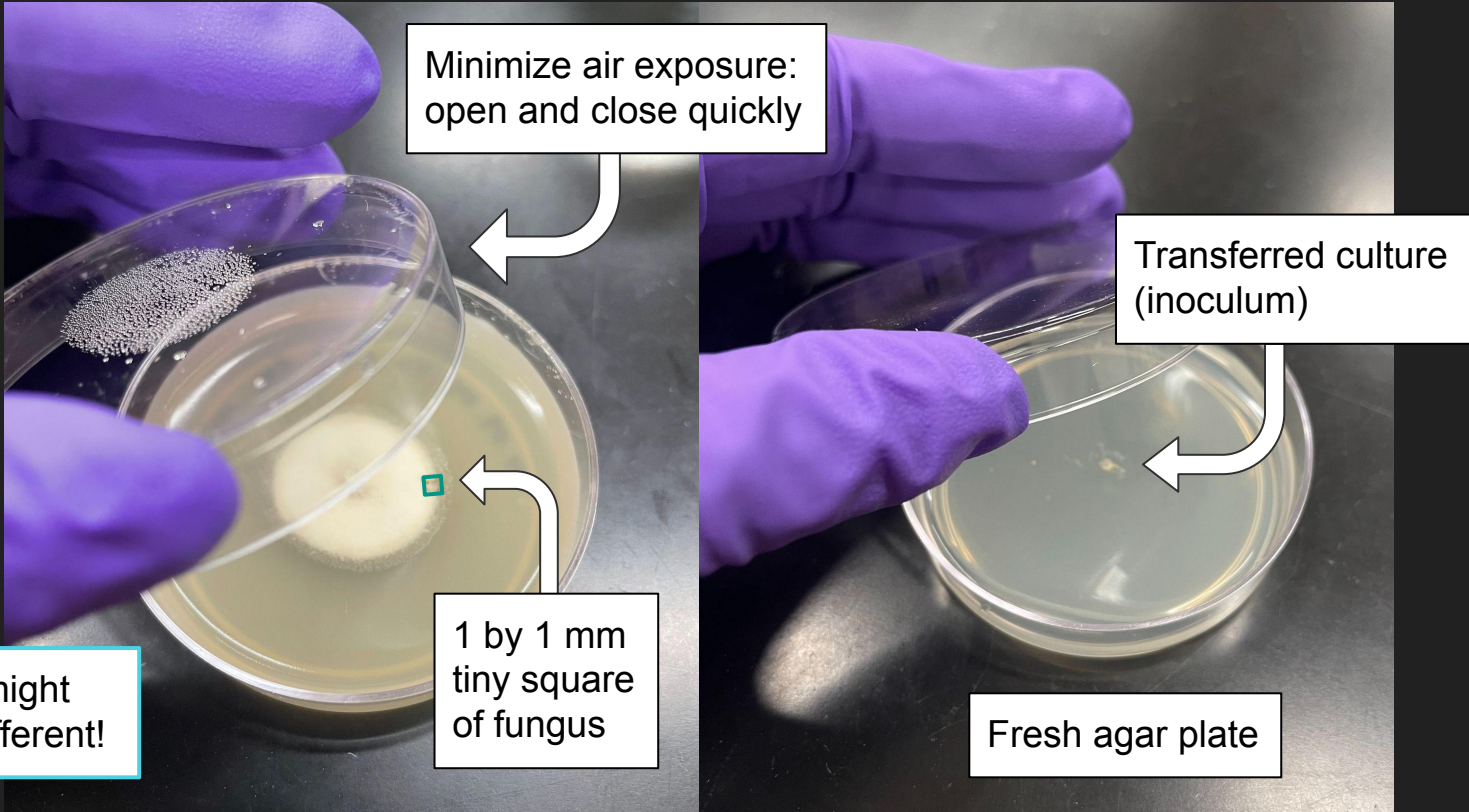
Pull Parafilm along
the plate edge

Label: name, group
number, date, and
sample description
on bottom of plate



Part 3

Isolate a pure culture



Part 4

Growth rate

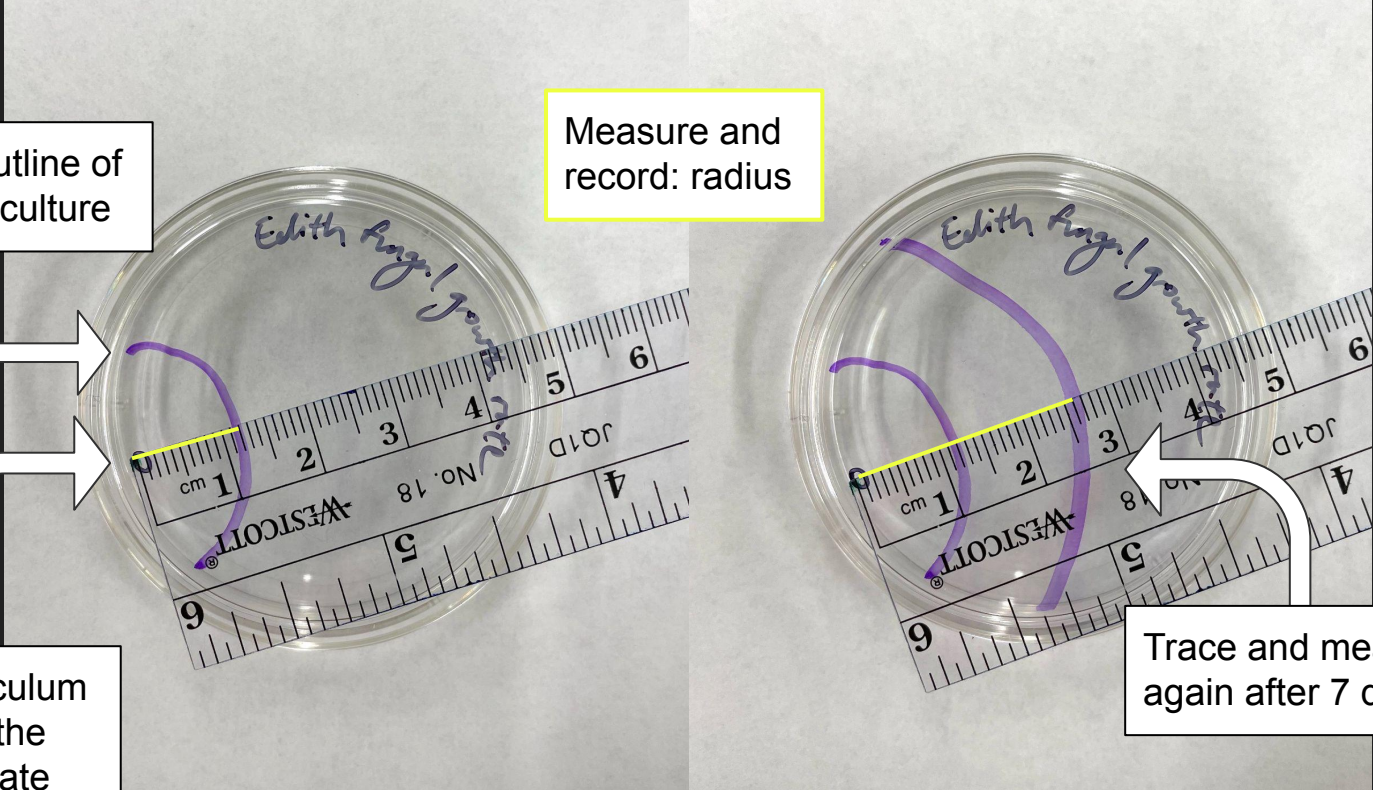


Trace the outline of
your fungal culture

Measure and
record: radius

Place the inoculum
on agar near the
edge of the plate

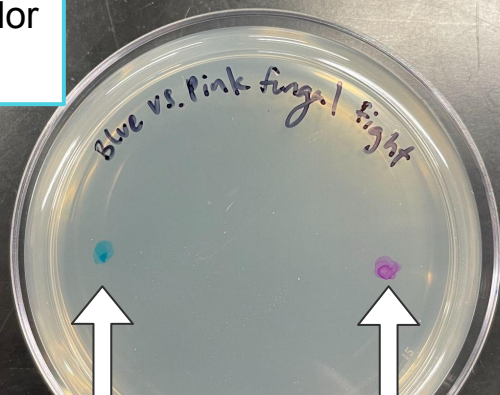
Trace and measure
again after 7 days



Part 5

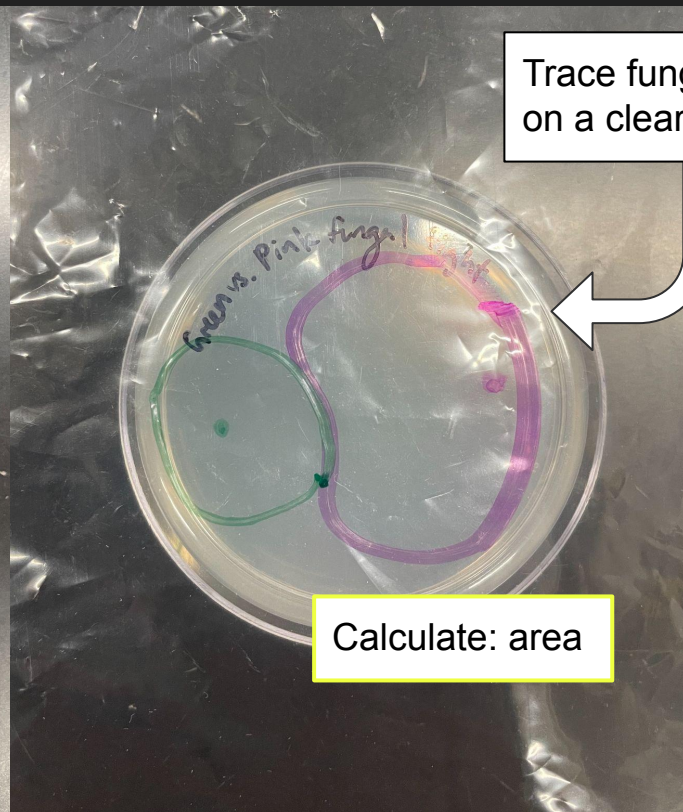
Fungal fights

Assign and record
each person's color
(or shape)



Matchup 2 fungi on a
plate and label with a
marker

Trace fungal outlines
on a clear sheet

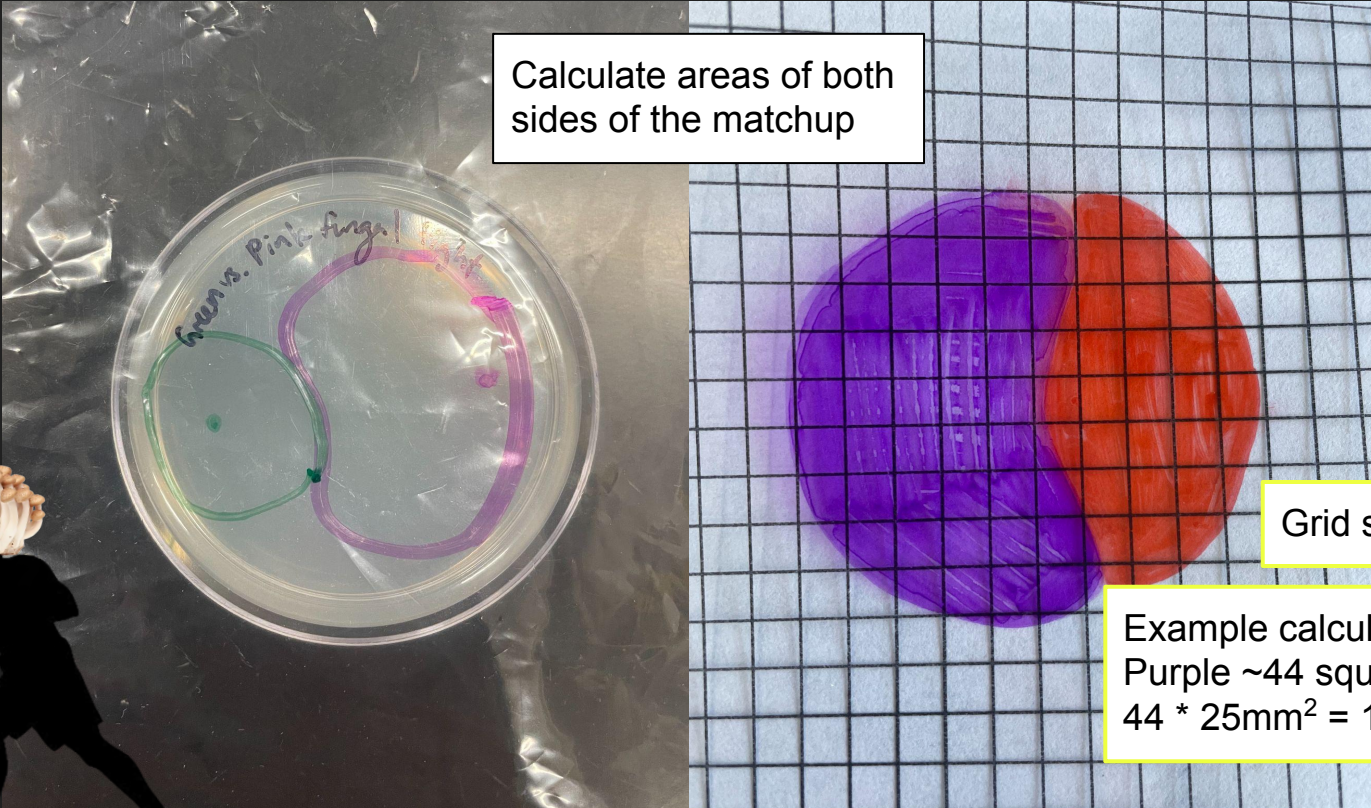


Calculate: area



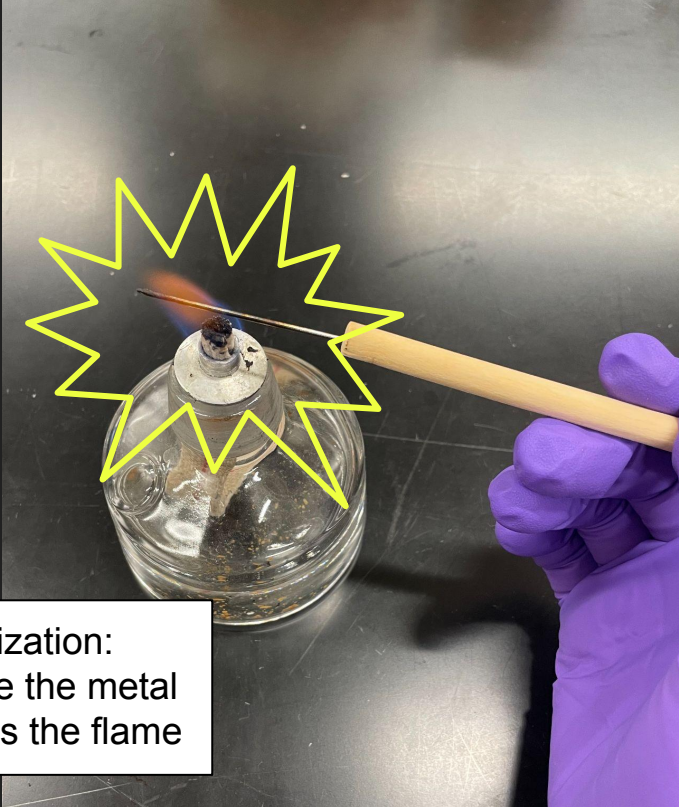
Part 5

Fungal fights: calculating a winner



Part 6

Viewing your fungi under the microscope



Flame sterilization:
quickly wave the metal
probe across the flame



Scoop up some fungus
with the sterile probe
(avoid the agar below)

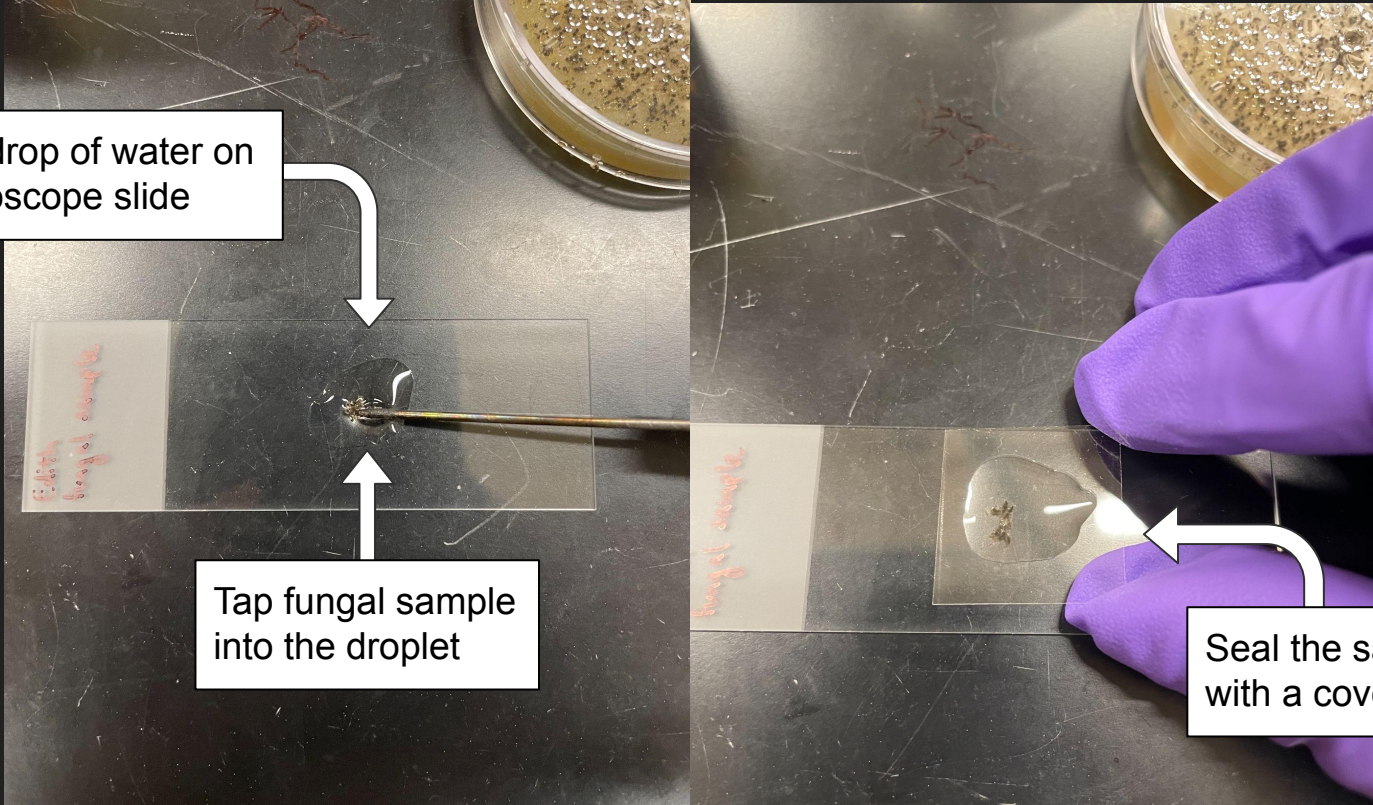
Part 6

Viewing your fungi under the microscope

Place a drop of water on the microscope slide

Tap fungal sample into the droplet

Seal the sample with a cover slip



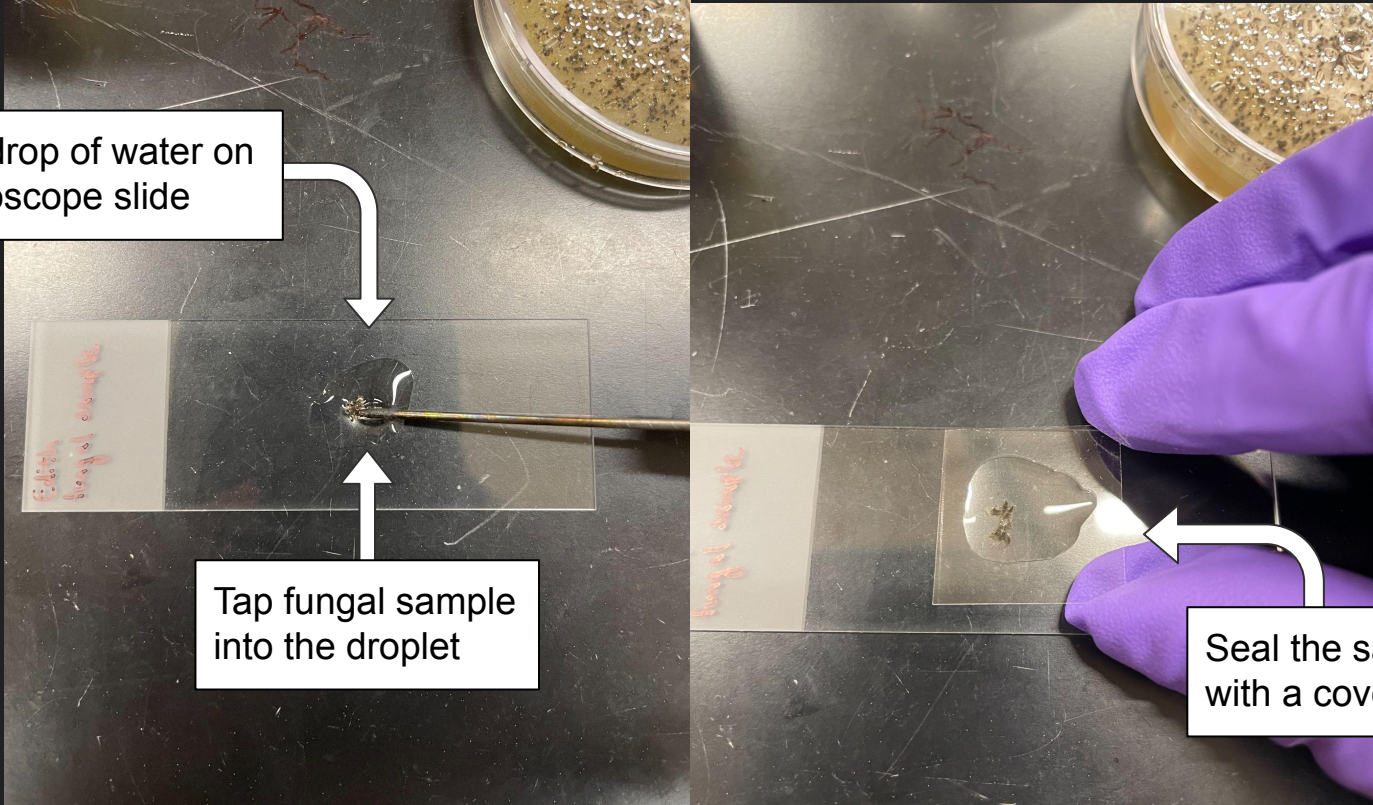
Part 6

Viewing your fungi under the microscope

Place a drop of water on the microscope slide

Tap fungal sample into the droplet

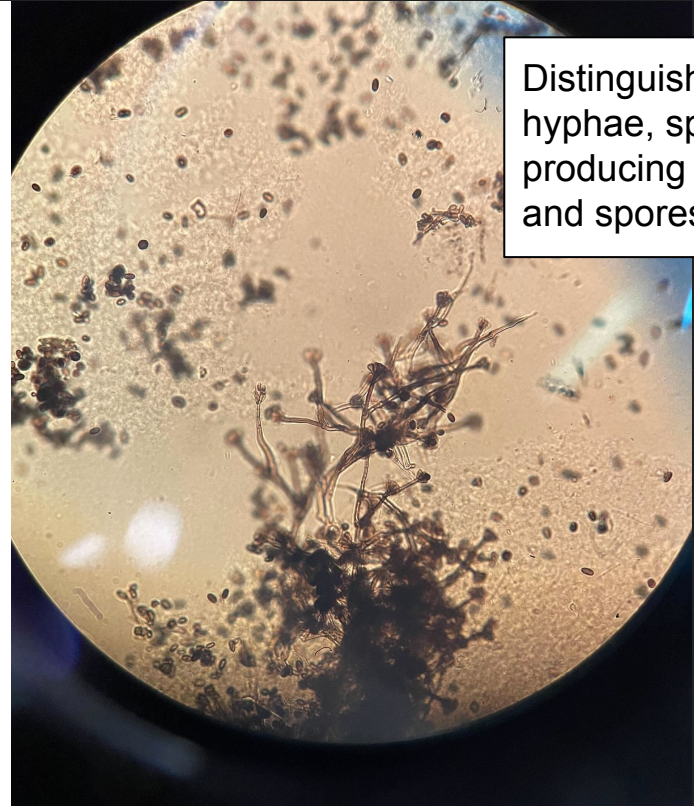
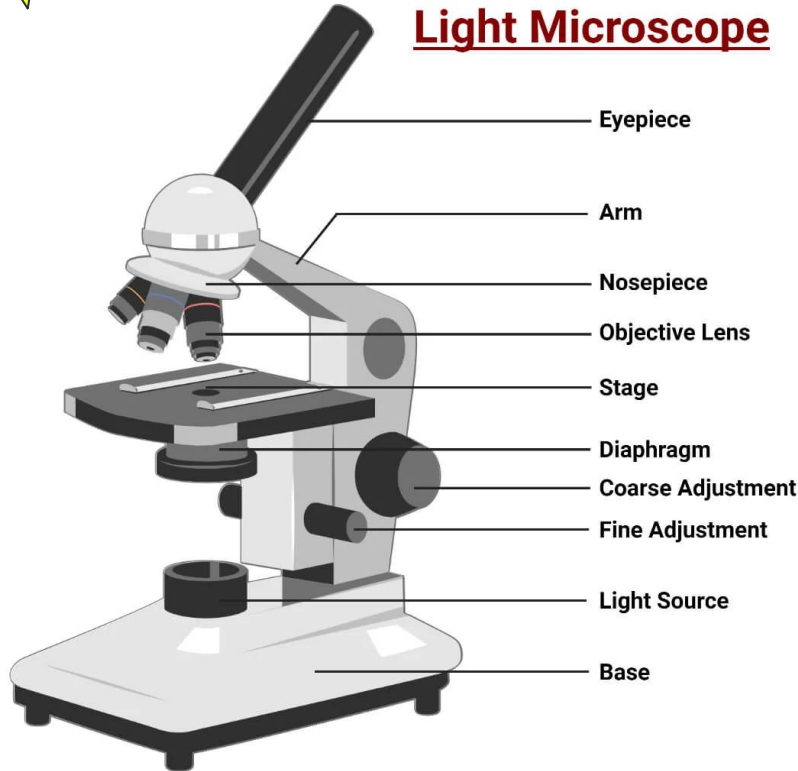
Seal the sample with a cover slip



Part 6

Viewing your fungi under the microscope

Light Microscope



Distinguish between hyphae, spore producing structures, and spores