

<b>Supplies</b> <ul style="list-style-type: none"><li>• Broth (2/grp)</li><li>• Water (2/grp)</li><li>• Slants (3/grp)</li><li>• NA plate (3/grp)</li></ul>	<b>Cultures</b> <ul style="list-style-type: none"><li>• S epi (broth)</li><li>• S mars (plate)</li><li>• B sub (slant)</li><li>• E coli (slant)</li><li>• M lut (slant)</li></ul>
<b>Procedures</b> <ol style="list-style-type: none"><li>1. Everyone – water to water (3X)</li><li>2. within group:<ul style="list-style-type: none"><li>– S epi: slant, plate</li><li>– S mars: broth, slant</li><li>– B sub: plate</li><li>– Ecoli: broth, plate</li><li>– M lut: slant</li></ul></li></ol>	

<b>Intro to Micro Lab</b> <ul style="list-style-type: none"><li>• Goals of lab<ul style="list-style-type: none"><li>• Learn microbial ID methods</li><li>• Learn microbial Growth needs</li><li>• Focus on Medical Microbes</li></ul></li><li>• Supplies</li><li>• Disposal</li><li>• Safety</li></ul>
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<b>Lab Supplies</b>	
<b>Provided for you each lab period</b> <ul style="list-style-type: none"><li>– cultures</li><li>– media</li><li>– special supplies</li></ul>	<b>Available all the time</b> <ul style="list-style-type: none"><li>– slides</li><li>– cover slips</li><li>– stains</li><li>– immersion oil</li><li>– lens cleaner</li></ul>

<b>Lab Supplies</b>	
<b>In your blue box</b> <ul style="list-style-type: none"><li>– Permanent marker (1)</li><li>– Lens paper (2)</li><li>– Bibulous paper (1)</li><li>– Clothespins (4)</li><li>– Loops (2) &amp; needles (2)</li><li>– Matches</li><li>– Bunsen burner</li><li>– Disinfectant (1)</li><li>– DI water (1)</li></ul>	<b>You must bring</b> <ul style="list-style-type: none"><li>– Lab coat</li><li>– Masking tape (1/2")</li><li>– Disposable gloves</li><li>– Ultra-fine point sharpie</li><li>– Lab notebook</li><li>– Scientific calculator</li></ul>

### Discarding Materials: Regular Trash Can

- Uncontaminated  
Paper products
- Used gloves



### Discarding Materials: “To Be Autoclaved” Bag

- Used petri plates
- Used plastic  
disposable pipets



### Discarding Materials: “To Be Autoclaved” Can



### Discarding Materials: Glass Discard

- BROKEN slides
- BROKEN glassware
- Disposable glass  
pasteur pipettes



### Discarding Materials: Wire Baskets



### Discarding Materials: Wire Baskets

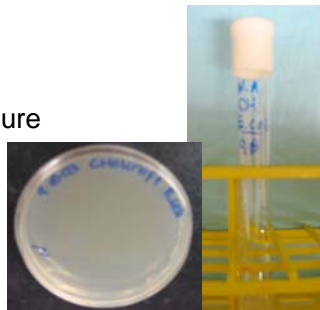


- WITH the liquid in them!
- WITH the agar in them!
- INCLUDING cultures!
- Right side up with caps on
- Erase all markings from tubes with acetone

### Labeling Plates & Test Tubes

5 things MUST be on your plates/tubes

- Type of media
- Your name
- Incubation temperature
- Date
- Organism/source
- **NEVER** ON LID



### Incubating Plates



### Incubating Test Tubes

- Place in GROUP rack
- Tape together, name facing out



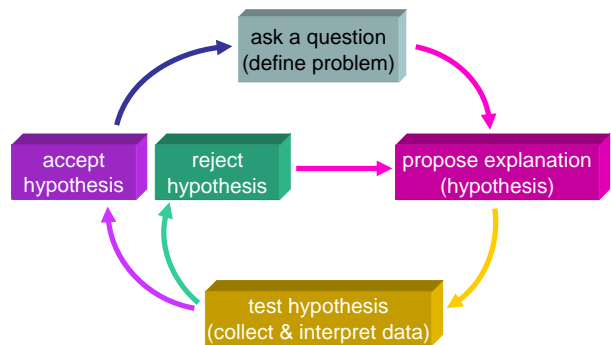
### Culturing Microbes in Lab

- “General purpose” media
  - Nutrient Agar (NA)
  - Tryptic Soy Agar (TSA)
- “Enriched” media
  - Sabouraud Dextrose Agar (SDA)
  - Blood agar (BA)

### Culturing Microbes in Lab

- Incubation
  - Temperature
  - O<sub>2</sub> and CO<sub>2</sub> requirements
  - Time

### “Scientific Method”



## Experimental Design

- Variables
  - dependent                      ■ controlled
  - Independent
- Experimental group vs. control group(s)