

Supplies needed

- 500 mL Erlenmeyer flask (not marked E, just a normal one)
- 100 mL graduated cylinder
- DI water
- Agar-Agar Powder (packet on the "A" shelf in the reagents corner, not the more expensive ultra-pure variety)
- Top and bottom halves of a glass petri dish, 150 mm diameter (small petri dish drawer, or reuse old one)
- Paper towel or hot pad

Procedure

1. Weigh 5.0 grams of agar powder, add to 500 mL flask
2. Add 100 mL DI water to the flask, swirl to mix (thus, a 5% wt/vol solution)
3. Put flask in microwave (it fits, just tilt the flask as you place it inside)
4. End goal is to boil the mixture for >1 minute, while preventing the mix to boil over
 - Set microwave for an amount of time, and watch for the solution to boil vigorously
 - Once it is around the boiling point, heat the mixture for 15-30 seconds at a time, then stop/open the door to prevent it from boiling over, swirl to mix, then resume heating ~5 seconds later
 - **The flask will be HOT, don't burn yourself** (use ~4 paper towels folded up, or a hot pad)
5. The mixture has been heated enough once it looks like a homogenous liquid, with all of the agar granules dissolved (it hasn't been heated enough if it looks grainy)
6. Let the solution cool at room temperature until it is relatively comfortable to touch for a second or two
7. Pour the agar into the bottom of the plate (we're going for a thick pour, which is more than you would do for a biology lab), cover, and let cool at room temperature for 30min-1hr
8. Place in the fridge