5X TBE(1.1M Tris; 900mM Borate; 25mM EDTA; pH 8.3)

REAGENT	**8L**	**2L**	**Sigma Aldrich Cat#**
disodium EDTA	37.5g	9.375g	E-5134
Trizma Base	432g	108 g	T-1503
Boric Acid	220g	55g	B-0252

In an appropriately sized beaker, dissolve Tris, Boric Acid and EDTA in a volue of distilled deionized water that is equal to about 75% of the volume of 5X buffer to be made. Add a large magnetic stirbar and place slurry on stirplate on high to facilitate mixing and dissolving of chemicals. EDTA may be slow to dissove, but low heat can be applied to facilitate dissolution. Once dissolved, add water to just below the desired volume. pH must then be adjusted to 8.3 by adding concentrated HCl, using a pH meter to constantly monitor the pH. There is no need to sterilize the solution and it can be stored at room temperature. Precipitation will form over time, but buffer is gererally still usable

0.5X TBE Electrophoresis Buffer

	for 1L
5X TBE	100 mL
Distilled, deionized water	900 mL

In an erlynmeyer flask, add 100mL of 5X TBE to 900mL of distilled deionized water. Mix well and use.

NOTE: In this lab, 5X TBE buffer is premade. You will only be required to dilute the 5X buffer to 0.5X for use.