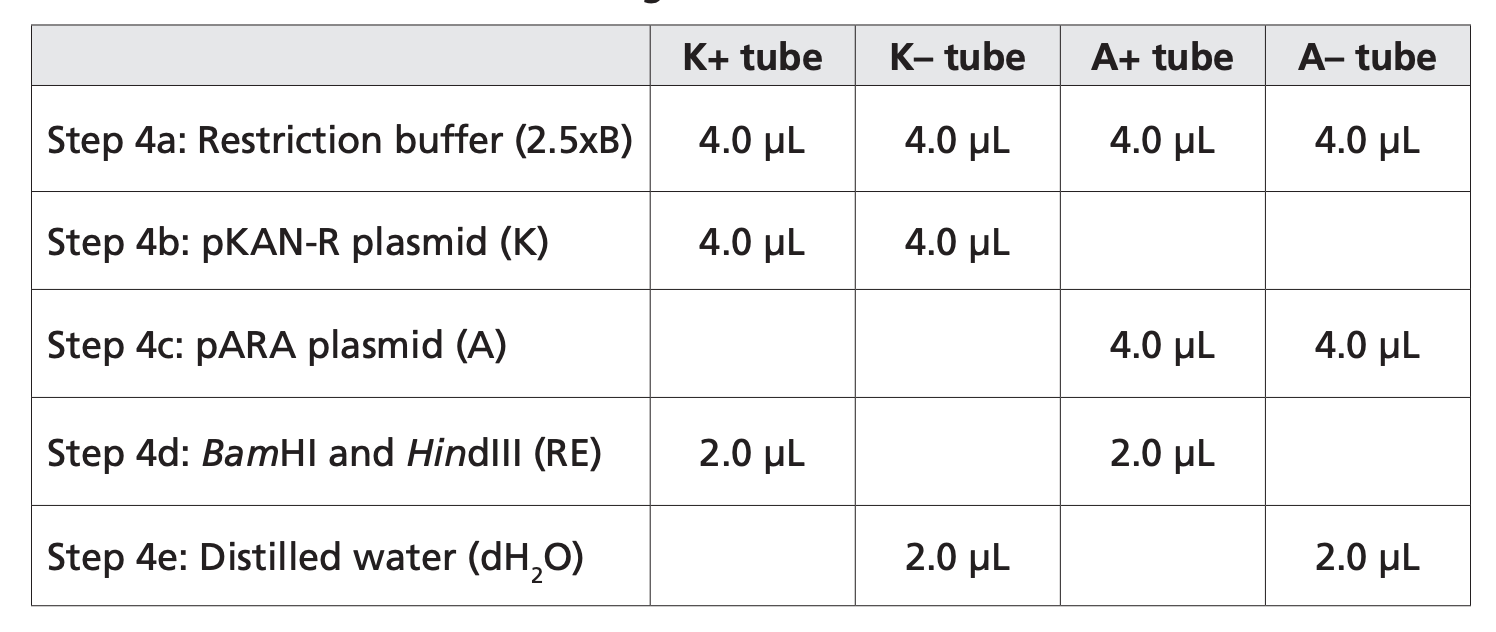
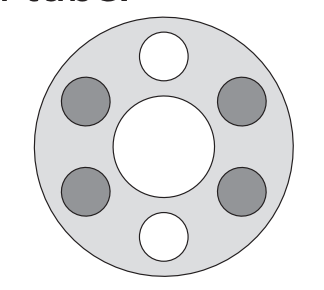
**Lab 2: Preparing to Clone the *rfp* Gene: Digesting the pKAN-R and pARA Plasmids**

1. Label four clean microfuge tubes as follows: “K+”, “K-”, “A+” and “A-” along with your group and period ID.

2. Using a new tip for each reagent, add the correct volume of each reagent into the corresponding tube as shown in the table below. Check off each reagent as you add it. When adding the last reagent to each tube, gently pump up and down to mix the solution.



3. Cap the tubes and pool the reagents at the bottom of the tubes by spinning down for 5 seconds in the microcentrifuge.



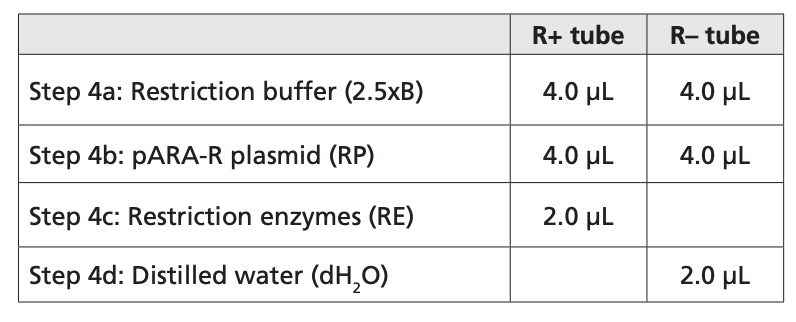
4. Place both tubes in a floating tube rack in the 37°C water bath or directly into a 37°C heat block for at least 15 minutes but no longer than two hours.

5. Once the incubation is finished, continue to Lab 3 *OR* have your teacher store your tubes in the freezer at -20°C.

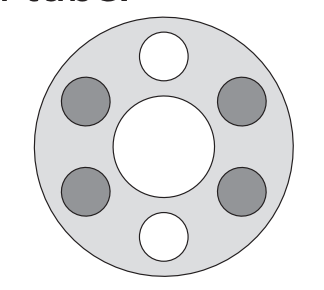
**Lab 2A: Preparing to verify the *rfp* Gene: Digesting the pARA-R Plasmid**

1. Label two clean microfuge tubes as follows: “R+” and “R-” along with your group and period ID.

2. Using a new tip for each reagent, add the correct volume of each reagent into the corresponding tube as shown in the table below. Check off each reagent as you add it. When adding the last reagent to each tube, gently pump up and down to mix the solution.



3. Cap the tubes and pool the reagents at the bottom of the tubes by spinning down for 5 seconds in the microcentrifuge.



4. Place all four tubes in a floating tube rack in the 37°C water bath or directly into a 37°C heat block for at least 15 minutes but no longer than two hours.

5. Once the incubation is finished, have your teacher store your tubes in the freezer at -20°C.