Pre-lab Assignment, Experiment #4: States of Matter Sleuth

1. What does it mean when a salt is 100% ionized?

2. 0.1022 g of an unknown sample was passed through a column of Amberlite IR-120(+) resin and titrated with 0.1030 M NaOH. If 15.6 mL of titrant was required to reach a phenolphthalein endpoint, what is the molecular weight of the unknown substance?

3. What are the mobile and stationary phases in column chromatography?