Phenol

Pre-lesson assignment- textbook page 442-445

Define the following terms

- Weak acid
- Phenol

Make notes on the Chemistry of Phenol

Use the following questions as guidance

1. Give three named examples of a chemical that can be considered a phenol
2. Show, using an equation, why phenol can be considered a weak acid.
3. Briefly describe how K_a is related to the acidity of a substance, and use it to explain why phenol does not react with sodium carbonate but does react with sodium hydroxide.
4. Write a reaction equation for:
    a. The bromination of phenol
    b. The nitration of phenol to produce two structural isomers
5. Draw the mechanism for either product of 4b.
6. Explain why phenol does not require $FeBr_3$ for 4a.