1. Define polymerization reaction and then complete the following polymerization reactions:
	1. **Polymerization reaction**-
	2. Propylene: CH2=CHCH3 🡪
	3. Chloroethene: CH2=CHCl 🡪
	4. Tetrafluoroethene: CF2=CF2 🡪
2. Write the formulas for alcohols and ethers:
	1. alcohol R-formula \_\_\_\_\_\_\_\_\_\_ c. ether R formula \_\_\_\_\_\_\_\_\_\_\_\_
	2. alcohol molecular formula \_\_\_\_\_\_\_\_\_ d. ether molecular formula \_\_\_\_\_\_\_\_
3. Name each of the following alcohols, give the molecular formula, and state whether the alcohol is primary, secondary, or tertiary.
	1.  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
	2. CH3CH2CH(OH)CH2CH(CH3)CH3 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
	3. CH3CH2CH=CHCH2CH2OH \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. Draw each of the following alcohols or ethers.
	1. 2-ethyl-3-heptanol
	2. 1,5-pentanediol
	3. Methyl pentyl ether
	4. 2-propoxyhexane
5. Complete the following reactions:
	1.  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ + \_\_\_\_\_\_\_\_\_\_\_\_\_

 H+

 🡪

 180 C

 H+

 🡪

 180 C

* 1. CH3CH(OH)CH2CH3 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ +\_\_\_\_\_\_\_\_\_\_\_\_\_

 H+

 🡪

40 oC

* 1. 2 CH3CH2OH \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ + \_\_\_\_\_\_\_\_\_\_\_\_\_
	2.  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ + \_\_\_\_\_\_\_\_\_\_\_\_\_

 H+

 🡪

 180 C