

1. Compare and contrast the effect of the OH group in organic and inorganic chemistry.
2. What is the IUPAC name of each of the following alcohols?
  - a)  $\text{CH}_3\text{CH}(\text{OH})(\text{CH}_2)_6\text{CH}_3$
  - b)  $\begin{array}{c} \text{CH}_2\text{CH}_2\text{CH}_3 \\ | \\ \text{OH} \end{array}$
  - c)  $\begin{array}{c} \text{CH}_3 \\ | \\ \text{CH}_2\text{CHCH}_3 \\ | \\ \text{OH} \end{array}$
  - d)  $\begin{array}{c} \text{OH} \qquad \qquad \text{CH}_3 \\ | \qquad \qquad | \\ \text{CH}_3\text{C}-\text{CH}_2-\text{C}-\text{CH}_3 \\ | \qquad \qquad | \\ \text{CH}_3 \qquad \qquad \text{CH}_3 \end{array}$
  - e)  $\begin{array}{c} \text{CH}_2\text{CH}_3 \\ | \\ \text{CH}_3\text{C}-\text{CH}_2\text{CHCH}_2\text{CH}_3 \\ | \qquad | \\ \text{OH} \qquad \text{CH}_2\text{CH}_2\text{CH}_3 \end{array}$
  - f)  $\begin{array}{c} \text{CH}_3 \qquad \text{CH}_2\text{CH}_3 \\ | \qquad | \\ \text{CH}_3\text{CHCH}_2\text{CHCH}_2\text{CH}_2\text{CH}_2\text{CHCH}_3 \\ | \\ \text{OH} \end{array}$
  - g)  $\text{CH}_3\text{CH}(\text{CH}_3)\text{CH}_2\text{CH}_2\text{CH}_2\text{CH}_2\text{CH}_2\text{OH}$
  - h)  $\text{CH}_3\text{CH}_2\text{OH}$

3. Draw the structural formula of each alcohol.

- a) methanol
- b) 1-pentanol
- c) 4-methyl-2-heptanol
- d) 9,9-dimethyl-6-propyl-4-decanol
- e) 3-ethyl-2-methyl-1-pentanol
- f) 2,4,5-trimethyl-2-hexanol
- g) 3,3-dimethyl-2-butanol
- h) 3,5-diethyl-3-octanol