

Electron Dot Structure

Worksheet

(1) Draw the electron dot structure for the following elements.

Lithium	Calcium	Chlorine
Germanium	Beryllium	Xenon

(2) Draw the Lewis structure for the following hydrocarbons.

C_2H_5OH	C_2H_5Cl	CH_3OCH_3
CH_3COOH	C_3H_8	H_2CO
C_2H_6	C_2H_4	C_2H_2

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Answers

Lithium $\text{Li}\cdot$	Calcium $\text{Ca}:$	Chlorine $:\ddot{\text{Cl}}:$
Germanium $\cdot\ddot{\text{Ge}}\cdot$	Beryllium $\text{Be}:$	Xenon $:\ddot{\text{Xe}}:$

$\text{C}_2\text{H}_5\text{OH}$ $\begin{array}{c} \text{H} \quad \text{H} \\ \quad \\ \text{H}-\text{C}-\text{C}-\ddot{\text{O}}-\text{H} \\ \quad \\ \text{H} \quad \text{H} \end{array}$	$\text{C}_2\text{H}_5\text{Cl}$ $\begin{array}{c} \text{H} \quad \text{H} \\ \quad \\ \text{H}-\text{C}-\text{C}-\ddot{\text{Cl}} \\ \quad \\ \text{H} \quad \text{H} \end{array}$	CH_3OCH_3 $\begin{array}{c} \text{H} \quad \quad \quad \text{H} \\ \quad \quad \quad \\ \text{H}-\text{C}-\ddot{\text{O}}-\text{C}-\text{H} \\ \quad \quad \quad \\ \text{H} \quad \quad \quad \text{H} \end{array}$
CH_3COOH $\begin{array}{c} \text{H} \quad \text{:O:} \\ \quad \\ \text{H}-\text{C}-\text{C}-\ddot{\text{O}}-\text{H} \\ \\ \text{H} \end{array}$	C_3H_8 $\begin{array}{c} \text{H} \quad \text{H} \quad \text{H} \\ \quad \quad \\ \text{H}-\text{C}-\text{C}-\text{C}-\text{H} \\ \quad \quad \\ \text{H} \quad \text{H} \quad \text{H} \end{array}$	H_2CO $\begin{array}{c} \text{:O:} \\ \\ \text{H}-\text{C}-\text{H} \end{array}$
C_2H_6 $\begin{array}{c} \text{H} \quad \text{H} \\ \quad \\ \text{H}-\text{C}-\text{C}-\text{H} \\ \quad \\ \text{H} \quad \text{H} \end{array}$	C_2H_4 $\begin{array}{c} \text{H}-\text{C}=\text{C}-\text{H} \\ \quad \\ \text{H} \quad \text{H} \end{array}$	C_2H_2 $\text{H}-\text{C}\equiv\text{C}-\text{H}$