Naming Alkanes - Worksheet #1

Name the following branched alkanes:

Name the following branched alkanes:	
H ₃ C——CH——CH ₃	
CH ₃	
H ₂ C	
H ₃ C——CH——CH ₃ CH ₂ ——CH ₃	
CH ₂ —CH ₃	
H ₃ C—CH ₂ —CH ₂ —CH—CH ₂ —CH ₃	
H ₃ C—CH ₂ —CH ₂ —CH ₂ —CH ₂ —CH ₃ CH ₂ —CH ₃	
CH ₂ —CH ₃ H ₃ C—CH ₂ —CH ₂ —CH—CH—CH ₂ —CH ₃ CH ₃	
CH ₃	
CH ₂ —CH ₂ —CH ₃	
CH ₂ —CH ₂ —CH ₃ H ₃ C—CH ₂ —CH—CH ₂ —CH ₂ —CH ₃ CH ₃	
H_3C — CH_2 — CH_2 — CH_2 — CH_3 — CH_3 — CH_3 — CH_3 — CH_3	
H_3C CH_3 CH_3 CH_3 CH_3	
CH₃	
CH ₃ ——CH ₃	
ÇH ₂ —CH ₃	
CH_2 — CH_3 H_3C — CH_2 — CH_2 — CH_3 CH_2 — CH_3	
ĊH₂—CH₃	
H ₃ CCH ₂ CH ₂ CH ₂	
H ₃ CCH ₂ CH ₂	
H_3C — CH_2 — CH_2 — CH_2 — CH_2 — CH_3 —	

CH — CH — CH	
CH ₂ —CH ₂ —CH ₃ H ₂ C—CH—CH ₂ —CH—CH ₃ CH ₃ CH ₂ —CH ₂ —CH ₃	
CH ₃ CH ₃ I I CH ₃ CH ₂ CH ₂ I I CH ₂ -CH ₂ -CH—CH ₂	
$\begin{array}{c} \text{CH}_3 \\ \text{CH}_3 \\ \text{CH}_2 \\ \text{CH}_3 \\ \text{CH} \\ \text{C} \\ \text{C} \\ \text{CH}_2 \\ \text{CH}_2 \\ \text{CH}_2 \\ \text{CH}_2 \\ \text{CH}_3 \\ \text{CH}_3 \\ \text{CH}_3 \end{array}$	
$\begin{array}{c} \text{CH}_3 \\ \text{I} \\ \text{CH}_2 & \text{CH}_3 & \text{CH}_3 \\ \text{I} & \text{I} & \text{I} \\ \text{CH}_2 - \text{C} & \text{CH} - \text{CH} \\ \text{I} & \text{I} & \text{I} \\ \text{CH}_2 & \text{CH}_2 & \text{CH}_3 \\ \text{I} & \text{I} & \text{CH}_3 \\ \text{CH}_3 & \text{CH}_3 \end{array}$	
сн ₃ сн ₃ сн ₂ сн ₂ сн—сн ₂ -сн—сн ₃ сн ₃	
$\begin{array}{c} CH_3 \\ CH_2 \\ CH_2 \\ CH_3 \\ CH_3 \\ CH_2 \\ CH_3 \\ CH_3 \\ CH_3 \end{array}$	
CH ₃ CH ₃ CH ₂ CH ₂ -CH—C—CH	

Naming Alkanes - Worksheet #2

Draw the <u>structural formula and line bond</u> for the following molecules. Remember the following
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- Carbons on the end of a chain are attached to three hydrogens
- Carbons in the middle of a chain are attached to two hydrogens
- Carbons that have one branch attached are also attached to one hydrogen
- Carbons that have two branches attached are not attached to any hydrogens

carbons that have two branches attached are not attached to any hydrogens
4-ethyl-octane
2-methyl-nonane
3,3-dimethyl-pentane
3-ethyl-pentane
3-ethyl-2methyl-heptane
2,2,3-trimethyl-butane
3-ethyl-2,2-dimethyl-hexane

2,3,4,5,6,7-hexamethyl-octane
4-ethyl-octane
2-methyl-nonane
2-ethyl-2methyl-butane
3-ethyl-pentane
2-ethyl-2-methyl-heptane