

Question One

Complete the table below

Name	Structure
Pentane	$\begin{array}{ccccccccc} & \text{H} & & \text{H} & & \text{H} & & \text{H} & & \text{H} & \\ & & & & & & & & & & \\ \text{H} & - \text{C} & - & \text{C} & - & \text{C} & - & \text{C} & - & \text{C} & - \text{H} \\ & & & & & & & & & & \\ & \text{H} & & \text{H} & & \text{H} & & \text{H} & & \text{H} & \end{array}$
Ethane	$\begin{array}{ccccccc} & & & \text{H} & & \text{H} & \\ & & & & & & \\ & & & \text{C} & - & \text{C} & \\ & & & & & & \\ & & & \text{H} & & \text{H} & \\ \text{H} & - & & & - & & \text{H} \end{array}$
Heptane	$\begin{array}{ccccccccccc} & \text{H} & & \text{H} & & \text{H} & & \text{H} & & \text{H} & & \text{H} & \\ & & & & & & & & & & & & \\ \text{H} & - \text{C} & - & \text{C} & - & \text{C} & - & \text{C} & - & \text{C} & - & \text{C} & - \text{H} \\ & & & & & & & & & & & & \\ & \text{H} & & \text{H} & & \text{H} & & \text{H} & & \text{H} & & \text{H} & \end{array}$
2,2-dimethyl propane	$\begin{array}{ccccccc} & \text{H} & & \text{CH}_3 & & \text{H} & \\ & & & & & & \\ \text{H} & - \text{C} & - & \text{C} & - & \text{C} & - \text{H} \\ & & & & & & \\ & \text{H} & & \text{CH}_3 & & \text{H} & \end{array}$
Pentane	$\begin{array}{ccccccc} & \text{H} & & \text{H} & & \text{H} & \\ & & & & & & \\ \text{H} & - \text{C} & - & \text{C} & - & \text{C} & - \text{H} \\ & & & & & & \\ & \text{CH}_3 & & \text{H} & & \text{CH}_3 & \end{array}$
2,3,4-trimethyl pentane	$\begin{array}{ccccccccc} & \text{H} & & \text{H} & & \text{CH}_3 & & \text{H} & & \text{H} & \\ & & & & & & & & & & \\ \text{H} & - \text{C} & - & \text{C} & - & \text{C} & - & \text{C} & - & \text{C} & - \text{H} \\ & & & & & & & & & & \\ & \text{H} & & \text{CH}_3 & & \text{H} & & \text{CH}_3 & & \text{H} & \end{array}$