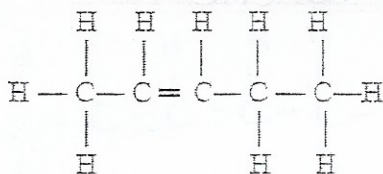


Key

Naming and Drawing Alkenes Worksheet and Key

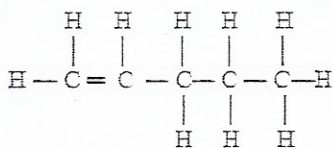
1) Draw and name the *cis* and *trans* condensed structure of:



<p><i>cis</i> condensed structure:</p>	<p><i>trans</i> condensed structure:</p>
<p>name: <u>Cis-2-pentene</u></p>	<p>name: <u>trans-2-pentene</u></p>

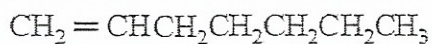
2. Name the following alkenes (include *cis*- or *trans*- for the alkenes that when appropriate)

a)



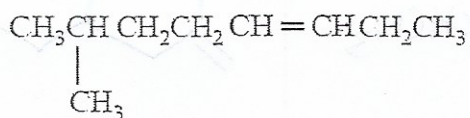
Name: 1-pentene

b)



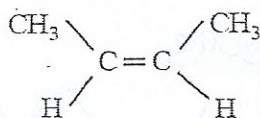
Name: 1-heptene

c)



Name: 7-methyl-3-octene
Be careful to correctly identify carbon #1.....

d)



Name: Cis-2-butene

d) trans-2-pentene

line-bond structure	condensed structure	skeletal structure
$ \begin{array}{ccccccc} & \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} & \end{array} $	$ \begin{array}{c} \text{CH}_3 \\ \diagdown \\ \text{C} = \text{C} \\ \diagup \quad \diagdown \\ \text{H} \quad \text{CH}_2\text{CH}_3 \end{array} $	

e) cis-2-methyl-3-hexene

line-bond structure	condensed structure	skeletal structure
$ \begin{array}{ccccccc} & & \text{H} & & & & \\ & & & & & & \\ & \text{H} & - \text{C} & - \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} & \end{array} $	$ \begin{array}{c} \text{CH}_3 \\ \\ \text{CH}_2\text{CH} \\ \\ \text{C} = \text{C} \\ \quad \diagdown \\ \text{H} \quad \text{CH}_2\text{CH}_3 \end{array} $	

1) cis-2-pentene trans-2-pentene 2a) 1-pentene b) 1-heptene c) 7-methyl-3-octene d) cis-2-butene
 e) trans-4-nonene f) cis-3-heptene 3) see website