**Alkanes**            Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. *Name the following alkanes:*

|  |  |
| --- | --- |
| 1.      CH3-CH(CH3)-CH2-CH3 |  |
| 2.      CH3-CH2-CH2-CH(CH3)-CH(CH3)-CH3 |  |
| 3.      CH3-CH(CH3)-C(CH3)(C2H5)-CH2-CH3 |  |
| 4.      CH3-CH2-CH(C2H5)-CH2-CH3 |  |
| 5.      CH3-CH(CH3)-CH(C2H5)-CH2-CH3 |  |
| 6.      CH3-CH2-CH(CH3)-C(CH3)(CH3)-CH3 |  |
| 7.      CH3-CH(CH3)-CH(CH3)-CH(CH3)-CH3 |  |
| 8.      CH3-CH2-C(C2H5)(CH3)-CH2-CH2-CH3 |  |
| 9.      CH3-CH2-CH2-CH(C3H7)-CH2-CH2-CH3 |  |
| 10.  CH3-CH(CH3)-CH2-CH(CH3)-CH3 |  |

1. *Draw the structural formula in any format you wish:*

|  |  |
| --- | --- |
| 1.      2,3-dimethylhexane |  |
| 2.      3-ethyl-4-methylheptane |  |
| 3.      2,3,5-trimethylhexane |  |
| 4.      2,2,3-trimethylbutane |  |
| 5.      3-ethyl-4-propylheptane |  |
| 6.      3-ethyl-2,5-dimethylhexane |  |
| 7.      2-methyl-4-propylheptane |  |
| 8.      3-ethyl-2-methyl-4-propyloctane |  |
| 9.      2,2-dimethylpropane |  |
| 10.  4,4-dipropylheptane |  |

1. *Properly rename the following:*

|  |  |
| --- | --- |
| 1.      1,2-dimethylbutane |  |
| 2.      1,4,4-methylpentane |  |
| 3.      2,3,3-trimethylbutane |  |
| 4.      1,4-diethylbutane |  |
| 5.      1,1,2,2-tetramethylethane |  |