**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:*

|  |  |
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| 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:*

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