

Chem 106 F07 students must know through undecyl- (undecane).  
 Also available as part of the [audio memory cues on the class web site](#).

Prefixes used to name the size of alkane chains

-CH <sub>2</sub> -	methylene
CH <sub>3</sub> -	methyl-
CH <sub>3</sub> CH <sub>2</sub> -	ethyl-
CH <sub>3</sub> (CH <sub>2</sub> ) <sub>2</sub> -	propyl-
CH <sub>3</sub> (CH <sub>2</sub> ) <sub>3</sub> -	butyl-
Five and above use the Greek numerical prefixes.	
CH <sub>3</sub> (CH <sub>2</sub> ) <sub>4</sub> -	pentyl-
CH <sub>3</sub> (CH <sub>2</sub> ) <sub>5</sub> -	hexyl-
CH <sub>3</sub> (CH <sub>2</sub> ) <sub>6</sub> -	heptyl-
CH <sub>3</sub> (CH <sub>2</sub> ) <sub>7</sub> -	octyl-
CH <sub>3</sub> (CH <sub>2</sub> ) <sub>8</sub> -	nonyl-
CH <sub>3</sub> (CH <sub>2</sub> ) <sub>9</sub> -	decyl-
CH <sub>3</sub> (CH <sub>2</sub> ) <sub>10</sub> -	undecyl-
CH <sub>3</sub> (CH <sub>2</sub> ) <sub>11</sub> -	dodecyl-
CH <sub>3</sub> (CH <sub>2</sub> ) <sub>12</sub> -	tridecyl-
CH <sub>3</sub> (CH <sub>2</sub> ) <sub>13</sub> -	tetradecyl-
CH <sub>3</sub> (CH <sub>2</sub> ) <sub>14</sub> -	pentadecyl-
CH <sub>3</sub> (CH <sub>2</sub> ) <sub>15</sub> -	hexadecyl-
CH <sub>3</sub> (CH <sub>2</sub> ) <sub>16</sub> -	heptadecyl-
CH <sub>3</sub> (CH <sub>2</sub> ) <sub>17</sub> -	octadecyl-
CH <sub>3</sub> (CH <sub>2</sub> ) <sub>18</sub> -	nonadecyl-
CH <sub>3</sub> (CH <sub>2</sub> ) <sub>19</sub> -	eicosyl-
CH <sub>3</sub> (CH <sub>2</sub> ) <sub>20</sub> -	uneicosyl-
CH <sub>3</sub> (CH <sub>2</sub> ) <sub>21</sub> -	docosyl-
CH <sub>3</sub> (CH <sub>2</sub> ) <sub>22</sub> -	tricosyl-
The pattern continues from here...	

Any of these names can be used to name a single chain alkane by removing the "yl" at the end and replacing it by -ane. Thus a saturated single chain alkane with 10 carbon in it is called decane. It would have two methyl groups, one at each end, and eight methylene groups in the middle. Sometimes branched saturated alkanes with 10 carbons in them will be referred to as decanes as well, but accurate naming of these compounds requires using systematic names which describe the branching.