## Alkanes #2: Say My Name, Say My Name—IUPAC Alkane Nomenclature

Hey, gang—welcome back! Okay, so quick disclaimer: Like I said before, Alkane Nomenclature isn't the highest octane (see what I did right there?) topic we'll cover in organic chemistry. However, just like in most areas of life, people won't take you seriously if you can't both walk-the-walk ***AND*** talk-the-talk. So let's get started and make sure we can back up our organic actions with some organic talk.

**1.)** Below are the names of various organic structures. Read each name and draw the correct structure.

i.) 3-ethyl-2,4-dimethylhexane

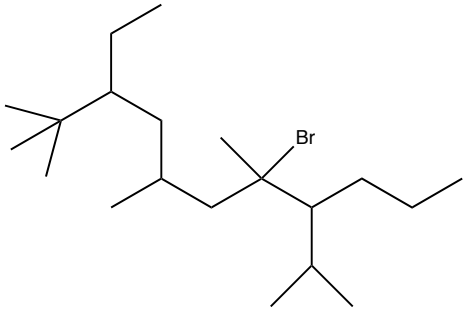
ii.) 5-ethyl-4-isopropyl-3,3,6-trimethyloctane

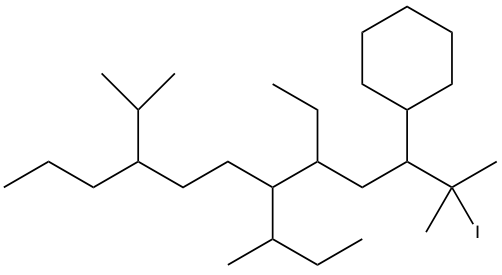
iii.) 2-chlorobutane (Also, what is the common name for this structure?)

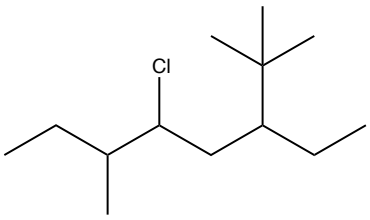
iv.) 5-bromo-6-*t*-butyl-3-ethyl-2,7,8-trimethyldecane

v.) 1-iodo-2-methylpropane (Also, what is the common name for this structure?)

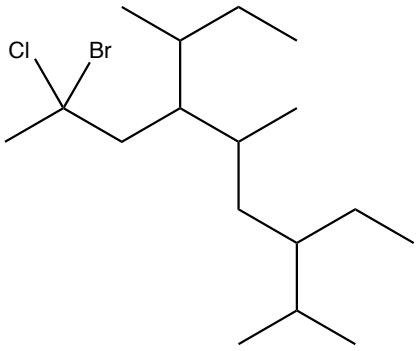
**2.)** Nice job. Alright, now for a little role reversal: I'm going to give you guys the organic structures, and you'll fire back with the correct name. Just remember our naming rules, stay organized, and fall back on your ABC's. I swear, sometimes alphabetizing the constituents is the hardest part. You got this!

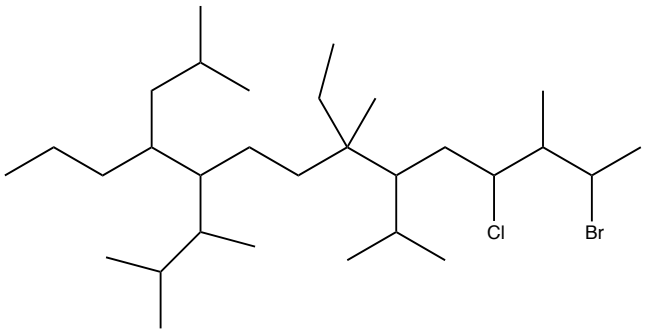


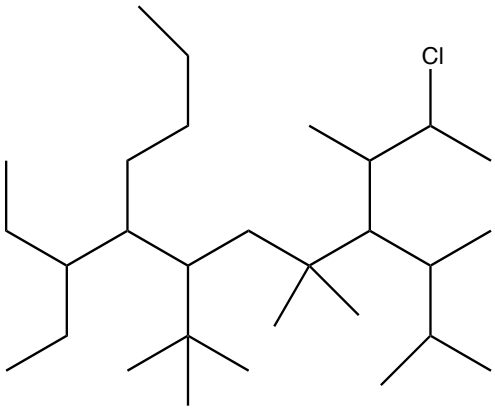



**3.)** See? Not too bad, just as long as you keep the naming rules in mind and stay organized. But now it's time to kick it up a notch: These structures will be a little more complex, but if you remember your naming fundamentals you'll be able to successfully conquer these wonky structures.






Okay, this is a little crazy looking, but you can handle it:  Stay organized and remember our rules!



Good work, guys. I know some of these structures are absurd, and the truth is: They are. But if you can understand and name these structures, come exam time, you'll be able to tackle anything thrown your way. Internalize the naming rules, memorize the common names so you can apply them when they show up as branch substituents, and you'll be **golden.**