

Sniffing Cat Food & Stinky Cheese HW

NO TEXTBOOK WORK TODAY!! Just answer the following questions in your notebook:

1. List the names of eight to ten substances at home that fit into the five smell categories we learned about today (minty, fishy, sweet, putrid, and camphor).
2. Predict the smell of the following molecules. Explain your reasoning.

Methyl octanoate
 $C_9H_{18}O_2$

monoethylamine
 C_2H_7N

ethyl acetate
 $C_4H_8O_2$

3. What do you think 1,5 pentanedithiol ($C_5H_{12}S_2$) would smell like? How confident of your answer are you? Explain why.
4. Let's say you smelled 30 vials, all with substances that contain two oxygen atoms in their molecular formulas. Twenty-nine of them smell sweet and one smells really putrid. Can you still claim a connection between molecular formula and smell? Explain your reasoning.